SWEDEN

COUNTRY PROFILE

**IMPLEMENTATION OF AGENDA 21:
REVIEW OF PROGRESS MADE SINCE THE
UNITED NATIONS CONFERENCE ON
ENVIRONMENT AND DEVELOPMENT, 1992**

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*United Nations Department for Policy Coordination and Sustainable Development
Division for Sustainable Development*
*The Information contained in this Country Profile is also available on the World Wide Web, as follows:
http://www.un.org/dpcsd/earthsummit*

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SWEDEN

This country profile has been provided by:

Name of Ministry/Office: Ministry of the Environment

Date: 12 December 1996

Submitted by: Sture Persson, Director

Mailing address: S-103 33 Stockholm, Sweden

Telephone: 46 8 405 2091

Telefax: 46 8 103807

E-mail:

Note from the Secretariat: An effort has been made to present all country profiles within a common format, with an equal number of pages. However, where Governments have not provided information for the tables appended to Chapters 4 and 17, those tables have been omitted entirely in order to reduce the overall length of the profile and save paper. Consequently, there may be some minor inconsistencies among the formats of the different country profiles.

All statistics are rendered as provided by the respective Governments.

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ACRONYMS

APELL	Awareness and Preparedness for Emergencies at Local Level
CFC	chlorofluorocarbon
CGIAR	Consultative Group on International Agriculture Research
CILSS	Permanent Inter-State Committee on Drought Control in the Sahel
EEZ	exclusive economic zone
ECA	Economic Commission for Africa
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
EFTA	European Free Trade Association
EIA	environmental impact assessment
ELCI	Environmental Liaison Centre International
EMINWA	environmentally sound management of inland water
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
EST	environmentally sound technology
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GAW	Global Atmosphere Watch (WMO)
GEF	Global Environment Facility
GEMS	Global Environmental Monitoring System (UNEP)
GEMS/WATER	Global Water Quality Monitoring Programme
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Pollution
GIPME	Global Investigation of Pollution in Marine Environment (UNESCO)
GIS	Geographical Information System
GLOBE	Global Legislators Organisation for a Balanced Environment
GOS	Global Observing System (WMO/WWW)
GRID	Global Resource Information Database
GSP	generalized system of preferences
HCFC	hydrochlorofluorocarbon
HIV	human immunodeficiency virus
IAEA	International Atomic Energy Agency
IAP-WASAD	International Action Programme on Water and Sustainable Agricultural Development
IARC	International Agency for Research on Cancer
IBSRAM	International Board of Soil Resources and Management
ICAO	International Civil Aviation Organization
ICCA	International Council of Chemical Associations
ICES	International Council for the Exploration of the Sea
ICPIC	International Cleaner Production Information Clearing House
ICSC	International Civil Service Commission
ICSU	International Council of Scientific Unions
IEEA	Integrated environmental and economic accounting
IFAD	International Fund for Agricultural Development
IGADD	Intergovernmental Authority for Drought and Development
IGBP	International Geosphere-Biosphere Programme (ICSU)
IGBP/START	International Geosphere-Biosphere Programme/Global Change System for Analysis, Research and Training
ILO	International Labour Organisation
IMF	International Monetary Fund
IMO	International Maritime Organization
INFOTERRA	International Environment Information system (UNEP)
INBIO	Instituto National Biologica
IOC	Intergovernmental Oceanographic Commission

ACRONYMS (Cont'd)

IPCC	Intergovernmental Panel on Climate Change
IPCS	International Programme on Chemical Safety
IPM	Integrated pest management
IRPTC	International Register of Potentially Toxic Chemicals
ISO	International Standards Organization
ITC	International Tin Council
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature and Natural Resources
MARPOL	International Convention for the Prevention of Pollution from Ships
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
PGRFA	Plant Genetic Resources For Agriculture
PIC	Prior Informed Consent procedure
PVC	Polyvinyl chloride
SADCC	South African Development Coordination Conference
SARD	Sustainable Agriculture and Rural Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Coordinator
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNU	United Nations University
WCP	World Climate Programme (WMO/UNEP/ICSU/UNESCO)
WFC	World Food Council
WHO	World Health Organization
WMO	World Meteorological Organization
WTO	World Trade Organization
WWF	World Wide Fund for Nature (also called World Wildlife Fund)
WWW	World Weather Watch (WMO)

NATIONAL ACRONYMS

EMAS	Eco-Management and Audit Scheme
FSEP	Foundation for Strategic Environmental Research
HELCOM	Helsinki Commission
ICCS	International Conference on Chemical Safety
IVA	Royal Academy of Engineering Sciences
NBF	National Board of Forestry
NUTEK	Swedish National Board for Industrial and Technical Development
SAREC	Swedish Agency for Research and Environmental Cooperation
SEI	Stockholm Environmental Institute
Sida	Swedish international development agency
SLU	Swedish University of Agricultural Sciences
SJFR	Swedish Council for Forestry and Agriculture Research

OVERVIEW

The Swedish Governement has long-term sustainable development very high on the political agenda. The overall objective is to stimulate economic and social development within the framework of the environment's carrying capacity, based on the principles formulated in the Rio-declaration and Agenda 21. The Government has formulated general environmental guidelines for development in Sweden within the various areas and sectors of society, which have been endorsed by the Swedish Parliament, the Riksdag. The Riodocuments were presented to Parliament, in Swedish, already in October, 1992.

Efforts in relation to global conventions, like marine pollution, protection of the climate and the ozone layer, as well as protecting the biological diversity has been intensified.

In order to contribute to sustainable development, Sweden have increased its regional and international cooperation with countries sharing similar problems and conditions. Sweden´s environmental policy within the European Union is directed towards promotion of long-term sustainable development in Europe. The Governement considers the following four issues as top priorities within the EU framework:

- measures to combat acidification and climate change,
- resource management and product recycling,
- the conservation of biological diversity, and
- tougher and more stringent regulation of chemicals.

Sweden also actively promotes effective and intensified environmental action in Central and Eastern Europe, in particular the Baltic Sea states. Sweden participates in an investment programme in the Baltic states aiming at improved waste water collection and treatment. Completion of the projects will have immediate consequenses on the pollution of the Baltic sea. Sweden recently initiated the project of creating an Agenda 21 for the the Baltic sea region, encompassing all countries around the Baltic Sea.

The main national environmental goals, which aim at achieving an ecocycle society and sustainable development, are formulated by Governement and Parliament as follows:

- protection of human health,
- conservation of biological diversity,
- management and sustainable use of natural resources, and
- protection of the natural and cultural landscapes.

Economic instruments are an important part of Swedish environmental policy. For many years Sweden has pursued a deliberate strategy of using indirect taxes as an instrument of environmental policy following our experience of energy taxes in general and the carbon dioxide tax in particular. The Riksdag has recently decided to implement a tax on natural gravel; taxation on waste is under consideration. In addition, the possibilities of a more environmental-related taxation system are currently being investigated. The whole body of road transport taxation is also reviewed. The introduction of energy-related taxes is also one of the objectives pursued by Sweden in the EU.

In early 1997, the Government intends to make proposals for a comprehensive Environmental Code which incorporates existing legislation into a coherent framework, while making many provisions more stringent.

Work to stimulate ecocycling is given priority, and producer responsibility is being further developed.

Sweden has developed a comprehensive management system for chemical products with the precautionary principle and the substitution principle as its linchpins. Under Government supervision, the industry has considerable responsibility for assessing and classifying substances, and removing harmful substances when less harmful ones are available. The industry supplements this efforts with its actions under the Responsible Care programme. Sweden has actively participated in international forums, which have been helpful in introducing and enforcing strict rules for chemical products domestically.

Sweden has also been actively involved in bringing about an international ban on exports of hazardous waste to non-OECD countries within the framework of the Basel convention.

Work on the development of an environmentally adapted transport system continues. Environmental standards within the transport sector have been tightened up. Stricter limit values apply to the emission from lorries and buses. Sweden has proposed to the European Commission to draft provisions on European Producers responsibility for catalytic converters.

Chapter 28 of Agenda 21 especially points out the importance of local action for sustainable development. As of today, all of the 288 Swedish local auhorities have initiated work with local Agenda 21. Many local authorities have employed so called Agenda 21 co-ordinators, and are, i.a., organizing seminars, courses and practical advisory services for the public. The local authorities are also co-operating with business enterprises and NGO's. Some of the main achievements so far have been improved waste management, water and sewage treatment and efforts for changing consumption patterns. Issues concerning traffic, energy, nature conservation, construction and chemicals are also being addressed.

One precondition for successful action is decentralised decision-making processes. In Sweden, local authorities have a large degree of independence, giving them a critical role in environmental protection. Each local authority has the responsibility to ensure that industry, traffic, waste management and energy use take health and environmental considerations into account.

In order to facilitate and give advice on the Agenda 21 activities in Sweden, the Government has established a National Agenda 21 committee with participation from parlamentarians, NGO's, the corporate sector and the scientific community. In addition to the Agenda 21 work, the Government seeks ways to combine environment with labour market policy. A one billion SEK environmental investment programme will start in 1997 to stimulate the adaptation to recycling of the water and sewage systems in residential areas and within construction.

Sweden has also developed general principles, guidelines and working methods in order to integrate the decisions at UNCED in the framework of Swedish development cooperation. The main objective of Swedish ODA is to focus on poverty reduction. Certain sectors are identified as particulary important to achieve sustainable development, namely fresh water, agriculture and forestry, marine environment, urban environment and energy. Support to capacity-building and education are high priorities, as well as support for democratic institutions and increased attention to the role of women in development. In 1995 Sweden was the second leading DAC member, with a ODA/GNP ratio at 0.89 per cent (US $ 2 billion in disbursements).

The implementation of the decisions of the Rio Conference is an ongoing process in which much has been achieved but where much also remains to be done. The current state of public finances has implied restrictions in some environmental programmes In a recent report from the Swedish Environmental Protection Agency it is stated that some of the national environmental goals.have not been or will probably not be reached. Accordingly new decisions will have to be taken. Some goals should be revised in order to make them more clear and distinct, with set time limits and clear implementing responsibility. This is needed i.a.to improve the following up-procedures. Information to the public will also to be improved. The responsibility of the sectors of the society will also be further emphazised taking into account the need for sustainable development in a broader sense.

The Swedish Government is currently elaborating a new national strategy on environment and sustainable development, which is planned to be introduced in Parliament in early 1998. This strategy will include the results of UNGASS, and other international agreements.

Sweden will put before UNGASS a more comprehensive national report, which will include a review of the implementation of UNCED decisions.

SWEDEN

1. Key National Sustainable Development Coordination Mechanism(s)/Council(s).
(1) Ministry of the Environment; (2) Agenda 21 Committee.

Contact point (Name, Title, Office): (1) Mr. Ulf Ottosson; (2) Mr. Rolf Lindell.

Telephone: +46 8 405 2094 , 405 2071 **Fax:** +46 8 103807
e-mail: ulf.ottosson@environment.ministry.se

Mailing address: S-103 33 Stockholm, Sweden

2. Membership/Composition/Chairperson
Agenda 21 Committee: Mrs. Anna Lindh, Minister of the Environment

2a. List of ministries and agencies involved:
Ministry of the Environment
Swedish Environmental Protection Agency.

2b. Names of para-statal bodies and institutions involved, as well as participation of academic and private sectors:
Members of Parliament (one from each political party);
Representatives from Municipalities and National County Boards;
Representatives from Industry, Trade Unions, Academic sector.

2c. Names of non-governmental organizations:
Swedish Society for Nature Protection
Swedish Association of Local Authorities
Representatives of the Swedish Church and the youth organisation Q2000

3. Mandate role of above mechanism/council:
Encourage the Agenda 21 work in the different sectors of society and make preparations for the 1997 special session of the United Nations General Assembly.

4. If available, attach a diagram (organization chart) showing national coordination structure and linkages between ministries:

Submitted by
(Name): Ulf Ottosson **Signature:**.

Title: Head of Section **Date:** 12 December 1996

Ministry/Office: Ministry of the Environment

Telephone: 45 8 405 2094 **Fax:** 46 8 103807

SWEDEN

AGENDA 21 CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES (with special emphasis on TRADE)

NATIONAL PRIORITY:

STATUS REPORT:

One criterion for work on the transition to sustainable development is to increase regional and international cooperation between countries which have largely similar problems and prerequesites. The importance of cooperation of this sort is emphasised through out the various chapters in Agenda 21. Sweden's environmental policy work within EU is founded on the strategy that the main goal is to promote long-term sustainable development in Europe. The Governement considers that the following four issues should be Swedish priorities in its EU strategy:

- measures to combat acidification and climate change,
- resource managing and product recycling,
- the conservation of biological diversity, and
- more stringent requirements as regard chemical control.

It is the the Governement's view that Sweden, as a member of the EU, should actively promote effective and intensified environmental action in Central and and Eastern Europe, in particular regarding the Baltic Sea and Sweden's immediate vicinity. Sweden partcipates in this context in the Pan-European Cooperation within the Environment for Europe process.

Sweden gives priority to the relationship between multilateral environmental agreements (MEAs) and the rules of trade, and advocates the use of trade measures with respect to MEAs. Other important issues include eco-labelling and market access, particularly for developing countries. Sweden is bound by the European Union's external trade policy. The OECD completed a review of Sweden's work on environment policy in 1996.

Sweden plays an active part in international fora such as the WTO, OECD and UNCTAD to develop environmental and trade policies that support each other. In the autumn of 1996 OECD presented its environmental performance review of Sweden in which OECD particulary looks at the Swedish pollution control and nature conservation , integration of policies and also co-operation with the international community.

Sweden is actively cooperating with like-minded member states and with the European Commission to speed the work of the WTO. With other EFTA nations, Sweden has formed a technical working group which looks at environmental and trade policies, focussing on relationships with international environmental conventions, transparency, packaging and labelling. This working group also reviews the follow-up to UNCED.

For Sweden, a most important issue is the relationship between the WTO and international environmental conventions. An OECD working group is currently looking at such linkages. Within this context, Sweden gives priority to process and production methods, life cycle analyses and the prerequisites for introducing common regulations.

As regards the debt problem of developing countries, Sweden has actively supported enhanced concessional debt treatment for the poorest countries in the Paris Club, i.e. Naples terms. Sweden is also actively engaged in the latest debt initiative by the World Bank and the IMF in order to attain sustainable debt burdens of the heavily indebted poor countries (HIPC).

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

AGENDA 21 CHAPTER 3: COMBATING POVERTY

NATIONAL PRIORITY:

STATUS REPORT: The major objective of all Swedish development co-operation is to reduce poverty. Sweden is pursuing this objective by selecting poorer countries as recipients and develop specific country programmes for theese. The Swedish International Development Cooperation Agency (Sida) has set up a task force on poverty reduction. The task force has, in their report entitled Promoting Sustainable Livelihoods, recommended some areas of particular relevance for actions to reduce poverty, for instance good governance, gender-sensitive strategies, integration of environmental policies, and institutional capacity-building.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The Swedish International Development Cooperation Agency administers the development cooperation.

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**
NB: Developed countries, where domestic poverty alleviation is not a major concern may wish to briefly describe their position regarding global poverty alleviation.

STATISTICAL DATA/INDICATORS

	1980	1990	1992	Latest 199_	
Unemployment (%)		1.9	5.9		
Population living in absolute poverty					

AGENDA 21 CHAPTER 4: CHANGING CONSUMPTION PATTERNS

NATIONAL PRIORITY:

STATUS REPORT:

• **National policy objectives/focus:**

The Parliament decided in June 1995 that one of four objectives of the Swedish consumer policy is the development of consumption and production patterns of a type which decrease the strain on the environment and contribute to a long term sustainable development. An action plan is being prepared by the Governement.

Economic instruments are an important part of the Swedish environmentally policy. For many years Sweden has pursued a strategy of using indirect taxes as an instrument of environmental policy following our experience of energy taxes in general and the carbon dioxid tax in particular. The Riksdag has recently decided to implement a tax on gravel; taxation on waste is under consideration. In addition the possibilities of a more environmental-related taxation system are currently being investigated. The whole body of road transport taxation is also reviewed. The use of economic instrument leeds i.a. to a change in production- and consumption patterns

Another way to get a more sustainable consumption pattern is to promote re-use of products or recycling of materials. The consumption must be oriented towards proper management of natural resources and the prevention of environmental impact. As of 1994, industry is responsible for ensuring re-use or recycling of materials in certain types of packaging.

A volontary nordic eco-labeling scheme was introduced in 1989. The symbol is a white swan. Criterias have been developed for 44 product groups, and there are about 1000 products on the Swedish market. The range of products is wide. There are however three main areas: every day commodites, office supplies and building and living.

The reorientation of education towards sustainable development and increasing public awareness is treated in chapter 36.

• **National targets:** The Producer Responsibility (Waste Paper) Ordinance of 1994, aimed at industry, has a collection target of 75% for waste paper by the end of the year 2000. For tires, the relevant ordinance has a target of less than 40% to be used as landfill by the end of 1996, and less than 20% by the end of 1998. The 20% target has already been reached. A packaging ordinance stipulates the weight which is to be re-used or recycled by the end of 1996, depending on the packaging material.

Cross-Sectoral Issues

1. Decision-Making Structure: The Public Cleansing Act (1979), administered by the Environmental Protection Agency, sets the legislative framework for a number of ordinances targeted at industry to reduce, re-use and recycle waste material such as packaging, paper and tires. The Ecocycle Commission has the task of defining new areas of industry responsibility. The Ecocycle Bill was passed in 1993 to reduce the environmental impacts of goods, notably by reducing waste, recycling and re-using goods (with adaptation) at the manufacturing stage. In 1995 the Commission put forward proposals concerning responsibility for cars.

2. Capacity-Building/Technology Issues:

3. Major Groups: Due to calculations made by the Swedish Environmental Agency the households are responsible for near half of the environmental emissions. It concerns emission from the households transportations, electricity consumption, heating of dwellings, sewage and from products.There is a continuous debate at the national level on the issue of consumption patterns, involving all major stakeholders, including government, parliamentarians, academia, NGOs, consumer groups, media, local authorities and industry. This debate has up to date resulted in legislation on the responsibilities of producers with regard to packaging, waste paper, and used tires. Different indirect taxes are used in part to promote economizing on energy and diminishing the emission of CO_2 , NOx.and sulphur. The Swedish Society for Nature Conservation has its own environmental label. A number of other organizations are also involved in providing consumers with information on the extent to which goods are environmentally friendly. An environmental label is used for ecologically grown and manufactured products. Industry (producers) is particularly targeted by regulation to reduce waste.

4. Finance: In 1996 the budget for the Nordic Eco-labelling was 16 million SEK from which 4,6 million were governement subsidies.

5. Regional/International Cooperation: Sweden has financed renewable energy, energy management and other related activities in the Baltic region and Eastern Europe. Other programmes promoting the use of bio-fuels and electric vehicles have been initiated. Sweden is also actively involved in the work of the International Energy Agency and the UN Economic Commission for Europe on, among others, projects concerning energy efficiency. Sweden plays an active role in the Nordic Council of Ministers, which introduced the Nordic Environmental Labeling System.

STATISTICAL DATA/INDICATORS

	1985	1990	1992	1995
GDP per capita (current US$)	12,051	26,605	28,291	26,100
Real GDP growth (%)	2.2	0.7	-1.7	3,6
Annual energy consumption per capita (Kg. of oil equivalent per capita)	4,762[a]	4,695	4,856	
Motor vehicles in use per 1000 inhabitants	443.5	497.5	483.1[b]	447

[a] 1989 [b] 1993

Government policies affecting consumption and production.

1. Goals and Agents (Stakeholders)

Indicate with a (✓) those agents which your Governments policies are meant most to influence.

Agents / Goals	Producers	Local authorities	Central Government	Households	Civil society
Material efficiency	✓	✓			
Energy efficiency:	✓				
Transport	–	–		–	
Housing	–	–		–	
Other	–	–		–	
Waste:	✓	✓		✓	
Reduce	✓	✓		✓	
Reuse	✓	✓		✓	
Recycle	✓	✓		✓	

Comments:

2. Means & Measures and Agents (Stakeholders)

Indicate with an (R) those agents who assume primary responsibility for any of the policy measures indicated; indicate with an (I) the agents for which the impact is expected to be especially significant.

Means & Measures / Agents	Producers	Local authorities	Central Government	House-holds	Civil Society
Improving understanding and analysis					
Information and education (e.g., radio/TV/press)		R		I	
Research	R/I		R		
Evaluating environmental claims	R/I				
Form partnerships	R				I
Applying tools for modifying behaviour					
Community based strategies	I	I	R	I	
Social incentives/disincentives (e.g., eco-labeling)	I			I	R
Regulatory instruments	I	I	R	I	
Economic incentives/disincentives	I	R			
Voluntary agreements of producer responsibility for aspects of product life cycle	R/I				
Provision of enabling facilities and infrastructure (e.g., transportation alternatives, recycling)		R			
Procurement policy	I	I	R		
Monitoring, evaluating and reviewing performance	I	R	I		
Action campaign					
Other (specify)					

Comments:

AGENDA 21 CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

NATIONAL PRIORITY:

STATUS REPORT: Sweden views population issues from a holistic perspective, advocating the adoption of a wide range of measures to ensure the balance between population growth and existing resources. The basis for all measures should be the needs of the individual and freedom of choice. Priority is given to the fight against poverty, measures for the empowerment of women and increased access to education and health care including sexual and reproductive health and rights. This position is a cornerstone in Swedish multilateral as well as bilateral development cooperation. Sweden is a major donor both to the UN Population Fund and to the International Planned Parenthood Federation.

☑ Check the appropriate boxes below:

• Governments view on population growth	☐ Too high	☐ Too low	☐ Satisfactory	
• Governments view on fertility level	☐ Too high	☐ Too low	☐ Satisfactory	

	To lower the rate	**To maintain status quo**	**To raise the rate**	
• Governments intervention on population growth	☐	☐	☐	
• Governments view on intervention on fertility level	☐	☐	☐	

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of Labour is responsible for activities under this chapter. The Swedish National Labour Market Board and the Swedish National Board for Industrial and Technical Development are also involved. Steps have been taken for coordination of projects and programmes.

2. Capacity-Building/Technology Issues: Information campaigns are being conducted on labour market programmes.

3. Major Groups: The Government cooperates with labour unions in this field. There are special programmes to support women in the labour market.

4. Finance:

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1990	1993	Latest 1994	
Population (Thousands) mid-year estimates	8,559	8,712	8.8	
Annual rate of increase (1990-1993)		0.6		
Surface area (Km^2)		449,964		
Population density (people/Km^2)		19		
Other data				

AGENDA 21 CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

NATIONAL PRIORITY: Equality in health is of top priority, as obvious tendencies towards increased health inequalities have been observed. Vulnerable groups are, among others, underprivileged women, non-European immigrants and blue-collar men. The high unemployment rates are likely to be a risk factor for health problems for affected persons as well as their families, including children. National consumption focus for health is on changes in food consumption habits. A decreased use of saturated fats, alcohol and tobacco is promoted, as well as an increased use of dietary fibres. The environmental efforts in many fields such as car exhaust norms, air quality norms, fresh water quality, noise abatement, heavy metals etc. are of course also aiming at improving the prerequisites of a good health. Sweden considers health matters to be among the most important prerequisites for a sustainable development within the WHO and other bilateral organisations.	
STATUS REPORT: A special investigator has been appointed to draw up an action programme for the reduction of environmentally related health hazards with a view to proposing mitigating actions. Malignant melanoma is increasing by five percent annually. Through information campaigns, the National Radiation Protection Institute (SSI), in collaboration with other national authorities and health care agencies, is attempting to alter people's sunbathing habits given the linkage between solar ultraviolet (UV) radiation and skin cancer. Information includes daily UV radiation forecasts (the UV index) which has been supplied to news media since 1993 through the Swedish Meteorological and Hydrological Institute. The widespread use of sun-beds has become a new cause of concern regarding increased UV exposure. Alcohol use per inhabitant above the age of 18 years is set to decrease by 25 % between the years 1990 and 2000. Sweden has for many years been and still is one of the main contributors to disease prevention and health promotion activities, mainly within the WHO and other bilateral organisations. The first and second World Health Conferences in Ottawa and Adelaide resulted in the Ottawa Charter and the Adelaide Recommendations. The 1991 World Health Conference in Sundsvall, Sweden, pointed out the need for Supportive Environments for Health. The Swedish parliament has in a 1994 bill (Invest in health - Health a top priority) emphasized the World Bank standpoint on the necessity of health investments.	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

	1980	1990	1994	
Life expectancy at birth: Male Female	72.3 78.3	74.3 80.3	78 (M+F)	
Infant mortality (per 1000 live births)	10	7	4	
Maternal mortality rate (per 100000 live births)	8	7		
Access to safe drinking water (% of population)				
Access to sanitation services (% of population)				
Other data				

AGENDA 21 CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

NATIONAL PRIORITY:	
STATUS REPORT: Sweden's land-use policy integrates the conservation of biological diversity with other land-use issues. Comprehensive municipal planning is being strengthened. The report "Sweden in 2009: Proposals for a Vision" was prepared by the National Board of Housing, Building and Planning on aspects of the promotion of sustainable development. It was circulated during 1996 for comment, and extensive nationwide consultations with various agents were held to present the results of their deliberations. See chapter 10 for additional information. Almost all local authorities have now adopted municipal master plans pursuant to the Planning and Building Act. Problems confronting sustainable urban development in Sweden include: the risk of de-populating rural and urban areas; growing traffic needs as they relate to the use of parks and green spaces for roads and highways; loss of services; and increased segregation. Sweden has commissioned a study on the possibility of designating areas in and around urban communities as national city parks. A number of problems have arisen due to businesses in the recreation sector organizing activities in certain areas (given the Right to Public Access). In response, the Environmental Protection Agency has suggested practical solutions. Shore protection is also a priority area, and has been expanded to include not only access for the public to shoores and waters as before but also the protection of plant and animal life. Mountain areas and archipelagos are also important in terms of physical planning due to their great importance for tourism and outdoor activity, both nationally and internationally. About one in eight Swedish homes (or about 530,000) are estimated to have radon concentrations which exceed the limit of 200 becquerel per cubic metre for new buildings. Of these, between 150,000 and 200,000 homes have radon gas concentrations which exceed 400 becquerel per cubic metre, which is the limit for a "sanitary nuisance". Remedial measures for a nomeowner can cost between US$ 4,500 and US$ 12,000. A State grant is available to cover half the cost of remedial action, but the maximum grant is approx. US$ 2,300. Remedial procedures, however, have too often failed to have the intended effect. SSI has therefore initiated training for contractors and consultants. Concerned municipal authorities have a good knowledge of radon and associated risks. An information campaign was started in 1995 calling upon the general public to carry out measurements and to take remedial action on the hazards of radon.	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:** Local authorities play important coordinating roles on regional urban planning.

4. **Finance:**

5. **Regional/International Cooperation:** Sweden is working with the EU in developing the European Spatial Development Perspective, focussing on urban system development, infrastructure, landscape management and transboundary cooperation, among others. This is important with respect to the allocation of EU funds.

STATISTICAL DATA/INDICATORS

	1990	1995	
Urban population in % of total population	83.1	83.1	
Annual rate of growth of urban population (%)	0.5	0.5	
Largest city population (in % of total population)	17.4	17.6	
Other data			

AGENDA 21 CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING
(See pages vii and viii at the beginning of the profile)

NATIONAL PRIORITY:

STATUS REPORT: Environment Impact Assessments (EIAs) have primarily so far been used for projects and not for policies or programmes. No major constraints have been found in the implementation of international legal instruments in the field of sustainable development. There is an established administrative and legal process for the signing and ratification of international agreements.

Sweden is going to introduce an Environmental Code in order to bring about a closer integration of different aspects of environmental legislation. The Committee on an Environmental Code presented its report in summer of 1996, and the Code should enter into force in 1998. The Committee will, among others, give consideration to appropriately amalgamating the rules for environment and health, introducing rules specifically to agriculture and forestry, proposing responsibility rules for environmental damage, and reviewing the procedural status of environmental organizations.

The Act Concerning the Management of Natural Resources is incorporated into the Environmental Code, to establish a closer link between land-use and environmental questions and augment the possibilities of achieving coordinated and cross-sectoral assessments.

Work is in progress to systematically include EIAs at an early stage of the political process, such as in the government's bill "Municipal comprehensive planning" under the Planning and Building Act. Sweden has proposed several national rules on EIAs, e.g. for detailed development plans and for railways. A number of national institutions are to report with proposals for provisions and legislation on EIAs in their sector, such as agriculture and forestry. The Environmental Protection Agency has issued general recommendations in its report "EIAs in the Environment Protection and Nature Conservation Acts." According to the report EIA should in the future include an analysis of health impacts as well as of impacts on the environment. Such comprehensive assessments are preferably to be carried out in advance of project planning as well as for planning purpose in general.

Sweden is considered a leading nation in the use of environmental taxes and charges, which on the whole have been positive. The Tax Change Committee is currently investigating the extent to which further environmental issues can be incorporated into the taxation system. The Committee is analyzing the socio-economic effects of energy and environment taxes and investigating the possibilities of simultaneously increasing the revenue from environment-related taxes, and reducing that from other taxes, such as the tax on labour. The Committee will give its report by the end of 1996.

Work is in progress to develop environmental management systems among central authorities. A pilot project is to take place during 1997 comprising about twenty authorities. The authorities are due to make an environmental investigation, environmental policy and action programme for further environmental integration according to the policy.

The Government has charged a special commissioner to propose a method how environmental considerations sho be taken in the field of Swedish Standardisation.

The Environmental Protection Agency is working on a study of the environmental integration into a number of sectorial agencys.

Cross-Sectoral Issues

1. **Decision-Making Structure (please also refer to the fact sheet):**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:** Swedish experts are taking part in the framing of an EU directive on EIAs for decisions of a more strategic character.

AGENDA 21 CHAPTER 9: PROTECTION OF THE ATMOSPHERE

NATIONAL PRIORITY:

STATUS REPORT:

The Montreal Protocol and its Amendments

- Montreal Protocol (1987) ratified before 1 July 1992
- London Amendment (1990) ratified before 1 July 1992
- Copenhagen Amendment (1992) ratified
- The latest report(s) to the Montreal Protocol Secretariat were prepared in 19--

United Nations Framework Convention on Climate Change

- UNFCCC was ratified 23 June 1993
- The latest National Communication to the UNFCCC Secretariat was submitted in September 1994

Additional comments relevant to this chapter: The government promotes policies and programmes in the areas of energy efficiency, environmentally sound and efficient transportation, industrial pollution control, sound land-use practices, sound management of marine resources and management of toxic and other hazardous waste. Studies on air pollution and depletion of the ozone layer are being carried out regularly. The phasing out of CFCs and HCFCs has followed a timetable with targets which have for the most part been met. The phasing out of all ozone-depleting substances should be completed by the year 2002. In the area of transboundary atmospheric pollution control, the government exchanges data and information at both the national and international levels.

The main instruments for reducing carbon dioxide emissions in Sweden are energy carbon taxation and the programme for energy efficiency improvements and increased utilization of renewable energy sources. During the spring of 1994 the Riksdag decided on certain changes in the energy and environmental taxation. An energy tax on fuels used in co-generation, i.e. combined heat and power production (CHP), was reinstated at half the rate from 1 July 1994 and remain in force. In the new system fuels used in district heating plants for deliveries of heat to industry receive a compensation of SEK 90 per MWh of heat delivered, but crude tall oil is exempted.

Furthermore, from 1 July 1994, wind power receives a special environmental bonus equivalent to the tax on the electricity delivered to the households, at present SEK 97 (ECU 10,4) per MWh. The bonus is paid to the distributors and passed on to the producer.

The 1 January 1996 the carbon dioxide tax on fuels increased to SEK 370 (ECU 39,7) per tonnes of carbon dioxid.

What concerns the taxes for industry the Governement has proposed an increase of carbon dioxide tax rate from 25 to 50 % of the general rate. Such increase requires possibilities to obtain tax abatement for the energy intensive industry unless likewise taxation is implemented in the competitive countries. The Governement has also proposed that energy taxation should increase with approximately 10 %.

The Environmental Protection Agency have reported that emissions of CO_2 have increased with one per cent from 1990 to 1995 and 5 per cent between 1990 to 1994. They conclude that the carbon dioxide target for the year 2000 will require certain additional measures.

The Environmental Protction Agency has also made a report on the effects of Climate Change for technical systems in Sweden. In summary the study shows that corrosion will increase in both a milder and wetter climate. Corrosion is strongly linked to acidification which means that the stress to our technical system may be great for a long time.

In the area of environment and transportation, comprehensive and systematic observations of emissions are being carried out. Linked energy, transportation, and industry activities are of medium to high priority. A parliamentary Energy Commission has reviewed energy supply and examined the energy programmes and the possibilities of phasing out nuclear power. Several environment related taxes and fees have been introduced (e.g., energy tax, CO_2 tax, SO_x tax and NO_x fee). Evaluations have shown the carbon dioxide tax to be the most effective instrument in the heating sector. Biofuels are mostly used for heating production and fossil fuels for electricity generation in combined heating and power plants, the reason being that fossils fuels are not taxed for electricity generation.

Activities aimed at a less polluting and safer transportation system have been addressed in part; however no substantial progress has been achieved since UNCED. Progress has been achieved through the classification of fuel and vehicles and through control of emissions and the government promotes the use of bio-fuels. Improved land-use policy also contributes to Sweden's decreasing air pollution. Sweden is active in international negotiations within the framework of the Geneva Convention on Long-Range Transboundary Air Pollution (LRTAP), i.a. on the development of a protocol on NO× and related substances, and in EU in the development of an acidification strategy to decrease sulphur emissions in other countries which contribute to soil and water acidification in Sweden. Sweden has ratified the LRTAP protocol from Geneva 1991 on control of emissions of volatile organic compounds or their transboundary fluxes and also the protocol from Oslo 1994 on sulphur emission ceilings and percentage emission reduction and the NO_x protocol from Sofia 1988 . Sweden also promotes the work of the IMO, the Helsinki Commission , the Oslo and Paris Conventions (OSPAR) and the North Sea Conference with a view to reducing emissions of air pollutants and other environmental impacts from shipping (see chapter 17 for further information).

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of the Environment is responsible for the protection of the atmosphere and is a full member of the National Coordination Mechanism for Sustainable Development. The new Railway Planning Act which entered into force in 1996 makes railway construction an integral part of decision-making on the management of natural resources. The Communications Committee will have issued in late 1996 a report on the continuing work for the environmental adaptation of the transportation sector. The Environmental Protection Agency collaborates with other traffic authorities on a project related to an environmentally appropriate transportation system. Local authorities report on similar activities through the National Board of Housing, Building and Planning. The Environmental Classification Commission has made proposals to help reduce greenhouse gas emissions and noise levels.

2. Capacity-Building/Technology Issues: Sweden's early detection system is considered adequate, with a good capacity to predict changes and fluctuations. Training and national capacity building activities to collect data and carry out research are good. The government does not actively encourage industry to develop safe technologies, but there is a programme that promotes the development of new and energy efficient end-use technologies.

3. Major Groups: NGOs and the private sector have made contributions to various activities to protect the atmosphere.

4. Finance: Sweden contributed approximately US$ 210,000 to the trust funds administered under the Montreal Protocol and Vienna Convention, and has supported developing countries with approximately US$ 1.9 million to enable them to comply with the Montreal Protocol. Sweden contributed in 1996 in total US $ 157 000 for activities in the United Nations framework on climate change.

5. Regional/International Cooperation: Sweden was actively involved in the preparation of the European Conference on Transportation and Environment which will be held in 1997. Sweden has also acceded to the agreements and protocols on long-range and transboundary atmospheric pollution. The UN and various inter-governmental organizations have contributed to activities to protect the atmosphere in Sweden. The Swedish National Board for Industrial and Technical Development (NUTEK) is conducting projects in the Baltic region and Eastern Europe on energy efficiency improvements and substitutes for fossil fuels. The government participates in the Global Ozone Observing System and in strengthening the Global Climate Observing System.

STATISTICAL DATA/INDICATORS

	1980	1990	1994	
CO_2 emissions (eq.metric million tons)	82	55.2	58.0	
SO_x (thousands metric tonnes)	507	136	97	
NO_x "	453	411	392	
CH_4 "		276	276	
Consumption of ozone depleting substances (tons)		8000*	550	
Expenditure on air pollution abatement in US$ equivalents (million)				

Other data: CO_2 -emissions 1995 are 56,2 (estimated eq. metric million tons))

* 1988 figure.

AGENDA 21 CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

NATIONAL PRIORITY:

STATUS REPORT: The report "Sweden in 2009: Proposals for a vision" is presently under review. It outlines the strengthening of urban areas through partnerships, mass transit expansion, and conservation of biological diversity. Mountains and archipelagos are other land areas important to Sweden for purposes of human settlements, forestry, agriculture, tourism and other amenities. The Environmental Advisory Council has in 1996 presented an analysis of the environmental situation of Sweden's archipelago areas, and to propose a strategy to improve conditions in those areas. See chapter 7 for additional information related to land-use policy.

The most important legislation in place to safeguard areas of critical relevance to the Right of Public access is that pertaining to shore protection. It has been extended to include the protection of plant and animal life. The Environmental Protection Agency completed a set of general recommendations on this expanded shore protection in 1995.

In December 1992, a special investigator was appointed to review certain questions in the Planning and Building Act, with a view to examining how planning can make a greater contribution to the prevention of environmental degradation and achieve effective conservation and use of natural resources.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The Act Concerning the Management of Natural Resources (1987), NRL, is to be incorporated into the Environmental Code so as to establish a closer link between land-use and the environment. Amendments to the Planning and Building Act (1987), along with the strengthening of municipal planning and the new Railway Planning Act (1996), are expected to facilitate a more coordinated, cross-sectoral and balanced implementation of the NRL. At the local level, municipalities are responsible for integrated planning. At the regional level, county administrative boards are responsible, and at the national level, the National Board of Housing, Building and Planning is in charge of integrated planning.

2. **Capacity-Building/Technology Issues:** The National Board of Agriculture is charged with developing an action plan to achieve the ten percent target of "ecologically farmed" acreage by the year 2000.

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

AGENDA 21 CHAPTER 11: COMBATING DEFORESTATION

NATIONAL PRIORITY:	Very high	

STATUS REPORT: Sweden uses the term "forest land" as that land which is suitable for wood production and is not being significantly used for any other purpose (commercial forests). Sweden's new forest policy was approved in 1993. It gives equal emphasis to both environment and production goals, provides for forest management on a multiple-use basis, and gives forest owners greater responsibility in the management of their forest lands. The conservation of natural and man-made forest environments is being reinforced and improved. About 1.2 million hectares of land (of which one-fifth is forest land), formerly owned by the National Forest Enterprise, can now be regulated as national parks or reserves without any land acquisition charge. At present, the proportion of reserved forest land amounts to approximately three percent of all forested lands with the majority situated in the northern mountain-area. As a result of the decision in Parliament in 1993 on Forest Policy, the state funds for buying forest land for nature reserves, especially in the south and east of Sweden, were increased with 50 percent. The future need to further increase the number of nature reserves will be evaluated in 1997.

Sweden has made significant progress in the following areas: enhancing public education; including post-graduate education in forest issues; carrying out research projects; improving existing forest programmes; establishing a geographic information database on forests; establishing linkages for the exchange of information; and improving the multiple roles of forests. A National Forest Inventory is carried out annually, covering all types of land use, with particular emphasis on tree resources and forest ecosystems. Production and environmental aspects are equally addressed. Although progress has been made in improving education, a higher standard of knowledge is still needed to enable forest owners to be more responsible. Counselling, training and inventories are therefore very important. An inventory of key biotopes and swamp forest lands is to be completed by 1997.

Sweden has made only partial progress in the following areas: the use of remote sensing; the use of environmental impact assessments; promotion of small-scale forest-based industries; and integration of social, economic and ecological values into national economic accounting systems.

Forest land affected by logging amounts to about 1.5 to two thousand square kilometres per year. Acidification affects about ten thousand square kilometres per year. Afforestation is also proceeding, albeit at a moderate rate. While the afforestation rate in the 1980s was about 30 square kilometres per year, it is now approximately 100 square kilometres per year. The creation of new national reserves, particularly in southern Sweden, has caused some conflicts between small land-owners and the authorities. The land owners are however entitled to a certain compensation for new nature reserves, if restricting logging. The government is in the process of suggesting new forest areas to be included in the European Ecological Network, Nature 2000. Big forest companies are trying to implement the concept of protecting the biological diversity e.g. by planning, setting aside areas from logging, protecting threatened species etc. The plan to introduce a certification system for forestry in 1997 is also strongly supported by those companies.

Sweden is actively involved in the Convention on Biological Diversity in the context of the forestry sector. Through silviculture organizations, the government has concluded approximately 100 conservation agreements with forest owners and awarded grants for nature and heritage conservation measures.

The National Environment Protection Agency is preparing a study which will emphasize future expectations in forestry and other sectors. Forest management practices are being experimented on both private and public forest lands.

The programme for the afforestation of arable land (in keeping with EEC Council Regulation 2080/92) is to be adapted to national conditions. It is intended to contribute towards an abundant and diverse man-made landscape, the conservation of biological diversity and the cultural values of landscapes.

Cross-Sectoral Issues

1. Decision-Making Structure: The Forestry Administration under the Ministry of Industry and Trade is primarily responsible for the forestry sector. Due to the Swedish constitution all decisions suggested by a Minister have to be taken together with and be confirmed by his colleges in the Governement. The Forestry Administration is also a member of the National Coordination Mechanism for Sustainable Development. In addition to the new Forestry Act of 1993, the other legislative instrument improved since UNCED is the Nature Conservation Act, amended in 1994. The National Board of Forestry (NBF) and 24 County Forestry Boards are responsible for the implementation of the Forest Act. In addition to the NBF, the Environmental Protection Agency is charged with evaluating the impact of forest policy on the Convention on Biological Diversity.

2. Capacity-Building/Technology Issues: The National Board of Forestry has drawn up a plan for biodiversity and sustainable forestry. Staffing in the Forestry Administration has been decreasing, from about 2400 professional staff to its present level of about 1500. The number of trained foresters working on forest management and protection is about 5200. The balance among central planning, middle level and field staffing is good.

3. Major Groups: Informal discussions can take place at various levels, and the initiatives can come from any interested parties. The involvement of interested parties and major groups is a matter of Swedish policy and practice.

4. Finance: The budget of the Forestry Administration was US$ 37 million in 1994, one-third of which is state-derived and the remainder from contractual services provided to forest owners and other state authorities. The EU helps finance training in forestry conservation. The afforestation programme has been allocated approximately US$ 24 million annually over a four-year period.

5. Regional/International Cooperation: Sweden played an active role in the development of the forest principles agreed to at UNCED, and uses these as a basis for its comprehensive aid programme for developing countries and economies in transition. Emphasis is placed on sustainable development and biodiversity.

STATISTICAL DATA/INDICATORS

	1985	1990	1993
Forest Area (Km^2)	280,050	280,200	280,000*
Protected forest area (Km^2)		5,840	
Roundwood production (solid volume of roundwood without bark in mill m^3)	49,7	52,9	54,0
Deforestation rate (Km^2/annum)			
Reforestation rate (Km^2/annum)	2,070	2,200**	
Other data	* ECE/FAO "Forest and other wood land" **FRA 1990		

AGENDA 21 CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

NATIONAL PRIORITY:

STATUS REPORT:

International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification Particularly in Africa

Each party shall file reports on implementation with the Conference of Parties, as often and in the form to be determined. Parties are to report on development of national action programmes. The Conference shall assist affected developing countries to make reports.

- Convention ☑ signed in 1994-- ☑ ratified in 1995

- The latest report to the Secretariat of the Convention was prepared in 19--.

Additional comments relevant to this chapter

There are no deserts or areas in danger of becoming deserts.

Sweden has taken a lead through the chairmanship of the negotiations of the Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification Particularly in Africa. The Swedish International Development Cooperation Agency (Sida) has been cooperating with countries, particularly in Africa, in many years on programmes on land degradation and drought consistent with the principles of the convention.

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS				
	1980	1990	Latest 199_	
Land affected by desertification (Km^2)				
Other data				

AGENDA 21 CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT: The Swedish policy of preserving nature and biodiversity in general includes the mountain regions. An important part of the area which is set aside as nationalparks is situated in the mountain. regions. Sweden have together with the other nordic countries developed a Nordic strategy for the Environment in which is stressed the need to keep the use of mountain regions within the limits imposed by nature's tolerance parameters so as to conserve biodiversity and create an opportunity for sustainable development of reindeer husbandry, tourism and outdoor pursuits. Mountains are very important in terms of forestry, agriculture, tourism and outdoor activity. The Environmental Advisory Council has made a number of proposals on physical planning, tourism, reindeer herding, among others, in its report "Sustainable development in Sweden's mountain regions." The report includes assessments of general effects on the environment. Snowmobile traffic has been given special consideration by the Council. The Parliament has recently decided on proposals from the Government concerning sustainable development in the mountain regions including i.a. stricter rules for the use of snowmobiles.

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

NATIONAL PRIORITY: **Very high**

STATUS REPORT:

The general environmental goals for agriculture policy are to safeguard a rich and varied cultivated landscape and its inherent cultural values, to preserve biological diversity and minimise the environmental impact of agriculture. Among specific environmental policy objectives are to:

- expand nature and landscape conservation programmes to 600 000 hectares of agriculture land ;

- reduce nitrogen leaching from agriculture land by 50 per cent by 1995, from the 1985 level, and the total consumption of commercial fertilisers by 20 per cent by the turn of the century;

- reduce the use of chemical pesticides in agriculture by 75 per cent (calculated in kilograms of active ingredients) by 1996, compared with the average consumotion for 1981-85;

- establish "ecological farming" on 10 per cent of arable land by 2000.

Sweden has introduced an environmental programme for agriculture in accordance with EEC Council Regulation 2078/92. This programme focusses on production methods in agriculture compatible with requirements of environmental protection and nature conservation. This includes an expanded programme on landscape conservation. Measures for environmentally sensitive areas and ecological production are also included in the programme. Compensation is provided for the conservation of threatened domestic species. An earlier programme on landscape conservation was incorporated into the programme.

During the last ten years the use of pesticides has by means of two consecutive reduction programmes (the use has been reduced by a half two times) decreased to a great extent. Pesticides which have been shown to pose a threat to water supplies have been prohibited for use or their use has been prohibited to specific areas.

The increase in sales of pesticides observed in 1994 was probably due in large part to hoarding prior to the increase in the environment charge which took effect later that year. Approval of certain pesticides normally sold in relatively large quantities was withdrawn in 1994, and these pesticides may only be sold for one more year. Use in 1994, therefore, remained at about 35% of the 1981-1985 average.

The National Board of Agriculture has presented an action plan for achieving the goal of ten percent of cultivated acreage being ecologically farmed by 2000.

Proposals for actions needed to fulfil the goal on reducing nitrogen leakage will be presented during 1997.

A system study of sustainable agriculture is beeing elaborated by the Environmental Protection Agency, the National Board of Agriculture, the University of Agricultural Sciences and the Federation of Swedish Farmers and others.

Cross-Sectoral Issues

1. Decision-Making Structure: The ministries primarily responsible for agriculture and rural development are the Ministry of Agriculture and the Ministry of the Environment. They participate in the National Coordinating Mechanism for Sustainable Development. The Natural Resources Act and the Act of Maintenance of Farmland (AMF) and its amendments are relevant legislative instruments in the area of agriculture and rural development. The national policy framework for SARD is partly covered by the amendments to the AMF. Government Bill 1995/96:76 states that Sweden, as a member of the EU, must introduce a supportive programme for the afforestation of arable land in keeping with EEC Council Regulation 2080/92. See chapter 11 for further information.

2. Capacity-Building/Technology Issues: Sweden will commission the appropriate authorities to carry out continuous observation and evaluation of the effects of the environmental programme under EEC Council Regulation 2078/92. Sweden will appoint a parliamentary committee to draft a strategy for reform of the EU Common Agricultural Policy (CAP). It will have the purpose of market-orienting, deregulating and "greening" agricultural policy. The report is due June 1997.

3. Major Groups:

4. Finance: Approximately US$ 227 million have been allocated annually to implement the environmental programme for agriculture.

5. Regional/International Cooperation: A few bilateral and multilateral initiatives have been implemented on soil conservation, animal husbandry and gene banks.

STATISTICAL DATA/INDICATORS

	1985	1990	Latest 199_
Agricultural land (Km^2)	34,940	33,820	
Agricultural land as % of total land area	7.8	7.5	
Agricultural land (m^2 per capita	4,184.4	3,951.3	
	1989/90	**1992/93**	**Latest 199_**
Consumption of fertilizers per (kg/Km^2 of agricultural land as of 1990)	10,721.5	8,811.4	
Other data			

AGENDA 21 CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

NATIONAL PRIORITY: Very high

STATUS REPORT:

Convention on Biological Diversity

- Convention ☑ signed in 1992 ☑ ratified in 1993
- Latest report will be submitted in 1997.

Convention on International Trade in Endangered Species of Wild Fauna and Flora

- Convention ratified before 1 July 1992.
- Latest report submitted in 1995.

Additional comments relevant to this chapter: The objectives of Sweden's national strategy on Biological Diversity (1993) places equal weight and importance on environmental and economic considerations. The strategy considers a continuous dialogue between environmental authorities and the private sector to be essential. Forestry legislation is applicable to the conservation of biodiversity (see chapter 11 of forests). Legislation on habitat has been revised and the drainage of certain parts of the south of Sweden have come to an end. A mire protection plan has been elaborated by the Environmental Protection Agency listing 350 of mires to be protected in the next 20 years. The most serious damage resulting in the loss of biodiversity is caused by the destruction of habitats. Over-harvesting and pollution have had a moderate impact on the loss of biodiversity, and the introduction of exotic species (both plant and animal) has been insignificant. Sweden expects that it will take at least five years to achieve results from the strategy.

The Environmental Protection Agency, in cooperation with other relevant national authorities and institutions, have presented a country study on biodiversity in Sweden. On the basis of this report, action plans in various sectors (agriculture, forestry, fishery and physical planning) were presented to the relevant national boards.

Sweden has reported to the European Commission that 640 protected areas could be included as part of the continuous ecological network known as Natura 2000. Sweden has also designated 75 special protection areas for birds to be included in Natura 2000. The work is governed by the Council directive on the protection of habitats, wild animals and plants, known as the Species and Habitat Directive, and the Council Directive on the conservation of wild birds, known as the Birds Directive. Sweden and Finland have drawn up a joint proposal for adding to the Species and Habitat Directive those habitats and species which are of great importance for nature conservation in the northern regions.

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of the Environment is primarily responsible for biodiversity and natural resources. Adequate national legislation is already in force.

2. Capacity-Building/Technology Issues: The national monitoring system concerning biodiversity has been strengthened, and a research center for biodiversity (which includes a network of scientists) in Uppsala and a national Science Committee on Biological Diversity have been established.

3. Major Groups: Local communities and municipalities have a responsibility for the conservation of biodiversity and sustainable use of biological resources, in particular through land-use or physical planning. Local authorities and communities have taken a major interest in developing Local Agenda 21 initiatives.

4. Finance: There has been an increase in grants for the establishment of protected areas, especially forests. Sweden has benefitted from an EU environmental fund (LIFE) for a number of projects on nature conservation and other sectors.

5. Regional/International Cooperation: Sweden has worked with INBIO of Costa Rica, World Resources Institute on the Global Strategy for Biological Diversity, and SAOC on support for gene banks. Activities are planned on research and training in Africa. The Environmental Protection Agency participated actively in the drafting of international guidelines for safety in biotechnology (with the United Kingdom and the Netherlands).

STATISTICAL DATA/INDICATORS

	1992	**Latest 199_**
Protected area as % of total land area	6.5	
	1990	**Latest 1995**
Number of threatened and rare species, (mammals)	25	23

Other data: Threatened and rare species 1995: Vertebrates 146, Evertebrates 1876, Plants(incl moss, alga,lichen,big fungi) 1479

Endangered vertebrates 1995 : Mammals 3, Birds 5, Others 4.

AGENDA 21 CHAPTER 16: ENVIRONMENTALLY SOUND MANAGEMENT OF BIOTECHNOLOGY

NATIONAL PRIORITY:

STATUS REPORT: Regarding procedural requirements for the safe handling, risk management and release of biotechnological products, the competent authorities consult with other governmental authorities. The National Chemical Inspectorate together with i.a. the Environmental Protection Agency is running a programme on the ecological hazards following the release of transgenic organisms. The Government Environmental Code Commission has proposed that the code should contain provisons concerning both chemical and biotechnical products (microorganisms which are specifically produced for technical use, for example, to be used as pesticides). According to the proposals biotechnical products should like chemical products be registered in a product register and may not be sold or used unless they are approved. In early 1997, the Government intends to make proposals to the Parliament for the new code.

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of the Environment is the body with primary responsibility for the environmentally sound management of biotechnology. Other institutions include the Environmental Protection Agency, Swedish Board of Agriculture and the Swedish Board of Occupational Safety and Health. The Act on Genetic Engineering was adopted in 1994, and is considered a safety mechanism for biotechnology, containing principles on biotechnology risk assessment and management. The competent authorities (as per EC directives) exchange information regarding procedural requirements for the safe handling, risk management and the conditions of release of biotechnology products.

2. Capacity-Building/Technology Issues:

3. Major Groups:

4. Finance: The budget for the programme on the ecological hazards following the release of transgenic organisms is US$ 375,000.

5. Regional/International Cooperation: Sweden participates in the OECD-cooperation concerning biotechnical issues. Sweden collaborates also with the African Center for Technology on studies on policy and research on biotechnology.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 17: PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES

NATIONAL PRIORITY:

STATUS REPORT:

The UN Convention on the Law of the Sea

☑ Signed in 1982-- ☑ Ratified in 1996--

The Swedish approach to the regulation of activities harmful to the environment also refers to marine environmental protection. A basic principle is to minimize the effects of hazardous activities, using the most modern technologies and considering economic feasibility. National and regional monitoring programmes and the Integrated Coastal Recipient Monitoring programmes identify major marine environmental threats from land-based sources. While the national and regional monitoring programmes are funded by the Government, the coastal recipient programmes are funded by the users.

There are several databases on coastal and marine management, but they are not as yet integrated. Work on their integration is on-going and several pilot studies have been carried out. Information is available on resources, cultural and socio-economic characteristics, protected areas and wetlands (including mangroves). Since 1992, an assessment of the state of the environment of coastal and marine areas has been carried out annually. A number of monitoring programmes also assess changes in the coastal and marine environment.

Sweden is currently implementing an extensive action programme aimed at reducing nutrient-rich effluents into freshwater bodies and the sea. All sewage treatment plants designed for at least 10,000 people along the west and south coast, up to and including the Stockholm archipelago, are to be reviewed. The guidelines for such review involve a reduction of nitrates by at least 50%. Metal content of the effluents is to be lowered by 70% for mercury, cadmium and lead and by 50% for other heavy metals for the 1985-1995 period. Effluents containing persistent organic compounds from the pulp and paper industry have been reduced significantly in recent years.

Sweden continues to actively promote the safeguard of wild salmon. The restoration of the ecological balance of the Baltic is also a major concern.

Sweden is working to secure the ratification by all Parties of the 1992 Convention on the Protection of the Marine Environment of the Baltic. An action programme has been adopted by countries in the Baltic searegion to safeguard and restore the ecological balance of the Baltic. The programme includes a focus on 132 sources of effluents from neighbouring countries. Of the 124 major sources of pollution in the Baltic region, eight are from Sweden. A third report on the states of the Baltic is being compiled under the aegis of the Helsinki Commission, HELCOM. Sweden did not achieve its target of halving nitrogenous emissions by 1995..

Sweden participates in an investment programme in the Baltic states aiming at improved waste water collection and treatment. Sweden recently initiated the project of creating an Agenda 21 for the Baltic sea region - Baltic 21- , compassing all countries around the Baltic Sea. Baltic 21 is building on the considerable success and momentum from environmental and other co-operation already operational within the Region. In the initial phase , Baltic 21 should focus on regional aspects and the integration of a number of key sectors.

The North Sea is seriously affected by wastewater from industry and urban settlements. For a long time Sweden has been actively working within several international conventions relating to the North Sea environment. The North Sea conferences are an important part of this work. Swedish efforts to improve the marine environment of the North Sea are concentrating on measures to reduce emissions of hazardous. In regional work for the North Sea , within the North Sea conference, the aim has been set of reducing emissions to harmless levels or zero within 25 years.

An integrated coastal area management programme has not been established

Cross-Sectoral Issues

1. Decision-Making Structure: The policy on oceans is part of the National Sustainable Development Strategy.

2. Capacity-Building/Technology Issues: The Government participates in the development of socio-economic and environmental indicators, in systematic observation systems, in the mussel watch programme, in capacity-building and training programmes and in the Global Ocean Observing System, but not in clearing-houses.

3. Major Groups:

4. Finance: Approximately US$ 25 million were allocated during 1995/1996 for environmental activities in Central and Eastern Europe, with special emphasis on the Baltic Programme. By the end of 1996, Sweden will have contributed approximately US$ 1.5 million to the Nordic Environment Finance Corporation to finance projects under the Baltic and Barents Sea programmes. Investments have begun at several of the major pollution sources of the Baltic region, and there is a need to identify new sources of pollution.

5. Regional/International Cooperation: The protection of the marine environment from land-based activities is regulated by the Helsinki Convention for the Baltic Sea and the Geneva Convention on Long-Range Transboundary Air Pollution, as well as the Osparcom Convention for the Northeast Atlantic which also regulates threats from sea-based activities. Sweden plays an active role in ensuring that the UN Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks will lead to a legally binding convention. Sweden is also working towards a code of conduct on responsible fishing under the FAO. Sweden is actively involved in the Environment and Climate and Marine Science and Technology programmes of the EU, the Project Group for Air and Marine Environmental Effects of the Nordic Council of Ministers, and in the International Council for Exploration of the Sea (ICES). Sweden works with the IMO, the IOC and other governments, and was actively involved in the 1995 Washington Conference on Persistent Organic Pollutants.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1994-
Catches of marine species (metric tons)	200	250	380
Population in coastal areas			
Population served by waste water treatment (% of country's total population)			
Discharges of oil into coastal waters (metric tons)	200[1]	1300	600[3]
Releases of phosphate into coastal waters (metric tons)	4700[2]	4600	4200
Releases of nitrate into coastal waters (metric tons)	131000[2]	123000	132600

Other data: 1. year 1989; 2. year 1984; 3. year 1993;

Chapter 17 (Oceans) Continued:

Check the boxes in the column below left:
For level of importance use:
*** = very important
** = important
* = not important
N = not relevant

Check the boxes in the column below right:
For level of implementation use:
*** = fully covered
** = well covered - gaps being addressed
* = poorly covered
O = not covered
N = not relevant

TABLE I. THE FOLLOWING ACTIVITIES HAVE BEEN CONSIDERED BY THE APPROPRIATE COORDINATING MECHANISM FOR INTEGRATED MANAGEMENT AND SUSTAINABLE DEVELOPMENT OF COASTAL AND MARINE AREAS AND THEIR RESOURCES.

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
**	a. Preparation and implementation of land and water use and siting policies.	**
**	b. Implementation of integrated coastal and marine management and sustainable development plans and programmes at appropriate levels.	*
**	c. Preparation of coastal profiles identifying critical areas including eroded zones, physical processes, development patterns, user conflicts and specific priorities for management.	*
***	d. Prior environmental impact assessment, systematic observation and follow-up of major projects, including systematic incorporation of results in decision-making.	***
**	e. Contingency plans for human induced and natural disasters.	**
***	f. Improvement of coastal human settlements, especially in housing, drinking water and treatment and disposal of sewage, solid wastes and industrial effluents.	***
**	g. Periodic assessment of the impacts of external factors and phenomena to ensure that the objectives of integrated management and sustainable development of coastal areas and marine environment are met.	**
**	h. Conservation and restoration of altered critical habitats.	*
**	I. Integration of sectoral programmes on sustainable development for settlements, agriculture, tourism, fishing, ports and industries affecting the coastal areas.	*
**	J. Infrastructure adaptation and alternative employment.	**
**	K. Human resource development and training.	**
**	L. Public education, awareness and information programmes.	*
**	M. Promoting environmentally sound technology and sustainable practices.	**
***	N. Development and simultaneous implementation of environmental quality criteria.	**

TABLE II. TECHNOLOGY (MARINE ENVIRONMENT)

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
***	A. Apply preventive, precautionary and anticipatory approaches so as to avoid degradation of the marine environment, as well as to reduce the risk of long-term or irreversible adverse effects upon it.	**
***	B. Ensure prior assessment of activities that may have significant adverse impacts upon the marine environment.	***
**	C. Integrate protection of the marine environment into relevant general environmental, social and economic development policies.	**
***	D. Develop economic incentives, where appropriate, to apply clean technologies and other means consistent with the internalization of environmental costs, such as the polluter pays principle, so as to avoid degradation of the marine environment.	*
**	E. Improve the living standards of coastal populations, particularly in developing countries, so as to contribute to reducing the degradation of the coastal and marine environment.	**
***	F. Effective monitoring and surveillance within the exclusive economic zone (EEZ) of fish harvesting and transportation of toxic and other hazardous materials.	**

TABLE III. SEWAGE RELATED ISSUES

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
***	A. Sewage related problems are considered when formulating or reviewing coastal development plans, including human development plans.	***
***	B. Sewage treatment facilities are built in accordance with national policies.	***
***	C. Coastal outfalls are located so as to maintain acceptable level of environmental quality and to avoid exposing shell fisheries, water intakes and bathing areas to pathogens.	***
***	D. The Government promotes primary treatment of municipal sewage discharged to rivers, estuaries and the sea, or other solutions appropriate to specific sites.	***
***	E. The Government supports the establishment and improvement of local, national, sub-regional and regional, as necessary, regulatory and monitoring programmes to control effluent discharge. Minimum sewage effluent guidelines and water quality criteria are in use.	***

TABLE IV. OTHER SOURCES OF MARINE POLLUTION, THE GOVERNMENT HAS:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
**	A. Established or improved upon, as necessary, regulatory and monitoring programmes to control emissions, including recycling technologies.	**
**	B. Promoted risk and environmental impact assessments to help ensure an acceptable level of environmental quality.	**
***	C. Promoted assessment and cooperation at the regional level, where appropriate, with respect to the input of point source pollutants from the marine environment.	***
***	D. Taken steps to eliminate emissions or discharges of organohalogen compounds from the marine environment.	**
***	E. Taken steps to eliminate/reduce emissions or discharges or other synthetic organic compounds from the marine environment.	**
***	F. Promoted controls over anthropogenic inputs of nitrogen and phosphorous that enter coastal waters where such problems as eutrophication threaten the marine environment or its resources.	**
***	G. Taken steps to develop and implement environmentally sound land-use techniques and practices to reduce run-off to water courses and estuaries which would cause pollution or degradation of the marine environment.	**
***	H. Promoted the use of environmentally less harmful pesticides and fertilizers and alternative methods for pest control, and considered the prohibition of those found to be environmentally unsound.	**
***	I. Adopted new initiatives at national, sub-regional and regional levels for controlling the input of non-point source pollutants which require broad changes in sewage and waste management, agricultural practices, mining, construction and transportation.	***
*	J. Taken steps to control and prevent coastal erosion and siltation due to anthropogenic factors related to, inter alia, land-use and construction techniques and practices.	0

TABLE V. ADDRESSING CRITICAL UNCERTAINTIES FOR THE MANAGEMENT OF THE MARINE ENVIRONMENT AND CLIMATE CHANGE. IN ORDER TO IMPLEMENT THIS PROGRAMME AREA THE GOVERNMENT IS CARRYING OUT THE FOLLOWING ACTIVITIES:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
**	A. Coordinating national and regional observation programmes for coastal and near-shore phenomena related to climate change and for research parameters essential for marine and coastal management in all regions.	**
**	B. Providing improved forecasts of marine conditions for the safety of inhabitants of coastal areas and for the efficiency of marine operations.	**
*	C. Adopting special measures to cope with and adapt to potential climate change and sea-level rise.	*
*	D. Participating in coastal vulnerability assessment, modeling and response strategies particularly for priority areas, such as small islands and low-lying and critical coastal areas.	0
*	E. Identifying ongoing and planned programmes of systematic observation of the marine environment, with a view to integrating activities and establishing priorities to address critical uncertainties for oceans and all seas.	*
**	F. Research to determine the marine biological effects of increased levels of ultraviolet rays due to the depletion of the stratospheric ozone layer.	**
**	G. Carrying out analysis, assessments and systematic observation of the role of oceans as a carbon sink.	*

TABLE VI. RATING OF ACTIVITIES IN THE AIR AND MARITIME TRANSPORT SECTORS IN THE SMALL ISLANDS DEVELOPING STATES (SIDS)

AIR TRANSPORT	RATING	MARITIME TRANSPORT	RATING
1. Frequency (external flights)		1. Frequency (external shipping)	
2. Frequency (in-country flights)		2. Frequency (in-country shipping)	
3. Cooperation at regional level in air transport and civil aviation		3. Cooperation at regional level in shipping	
4. Cooperation at international level		4. Cooperation at international level	
5. Economic viability of national air line		5. Economic viability of national shipping line(s)	
6. Economic viability of regional air line		6. Economic viability of regional shipping line (s)	
7. national level training in skills for air transport sector		7. National level training in skills for maritime transport sector	
8. Access to training in skills for air transport sector within the region		8. Regional level training in skills for maritime transport sector	
9. Access to international training for air transport sector		9. Access to international training for maritime transport sector	
10. Supportive of ICAO			

AGENDA 21 CHAPTER 18: **PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES**

NATIONAL PRIORITY:

STATUS REPORT: The Natural Resources Act represents an over-arching law through which the use of land and water are interlinked.

Eutrophication of Sweden's water supplies has been a geographically widespread problem for a long time, affecting lakes, watercourses, groundwater, coastal and marine areas. In 1993 the Government initiated an inquiry into ways to improve management of groundwater. A special investigator was appointed in 1995 to review liming activities in lakes and waterways.

In certain developed areas where water is in short supply and salt water has seeped into individual wells, the problems have become acute in recent years. The objective is to halve land-based emissions of anthropogenic nitrogen to the sea and to achieve a sharp reduction in the emissions of phosphorus. Sweden has also entered into international commitments which involve reductions of land-based nitrogen and phosphorus content in effluents by 50% between 1985/87 and 1995.

An amendment to the Natural Resources Act was accepted to expand the number of rivers and waterways to be protected from hydro-electric development. A special investigator was appointed in 1993 to review management of groundwater resources, with the aim of making proposals for their safeguarding and balanced use, as well as improvement through better physical planning. The allocation of responsibility among the authorities concerned is diffuse and legislation is difficult to overview. There is also a lack of coordination in terms of information, technological development and common solutions.

Sweden is currently implementing an extensive action programme aimed at reducing nutrient-rich effluents into freshwater bodies and the sea, with a view to halve land-based sources of marine pollution, particularly of phosphorus.

Cross-Sectoral Issues

1. Decision-Making Structure: The bodies primarily responsible are the Ministry of the Environment, and the Environmental Protection Agency. The County Administrative Boards are also involved. The policies/laws on the issues discussed in this chapter are: the Natural Resources Act, the Environment Protection Act, the Act Concerning Management of Natural Resources (1987:12), the Government Bill on the Environment (1990/91:90), and the Government Bill on the Environment Debt (1994).

2. Capacity-Building/Technology Issues:

3. Major Groups:

4. Finance:

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199-	
Fresh water availability (total domestic/external in million m^3)				
Annual withdrawal of freshwater as % of available water	2			
Other data				

SWEDEN

AGENDA 21 CHAPTER 19: ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS

NATIONAL PRIORITY:

STATUS REPORT: Approximately 45,000 chemical substances and about 20,000 preparations are marketed for use in Sweden at present. A Government bill containing proposals and targets for the control of chemicals has been taken by Parliament providing basis for further priorities in the national chemical risk reduction work. Efforts to restrict the total number of chemicals have focused mainly on total or partial reductions of compounds which are particularly hazardous to health and the environment. While some of the reduction targets have not been met, there is a downward trend in the use of toxic chemicals. One of the underlying principles of chemicals control is that manufacturers and importers are primarily responsible for the chemical substances, products or goods which they deliver and that the use does not cause harm.

Swedish law on chemicals control contain scientific, product and handling targets aimed to facilitate supervisory authorities to ensure that businesses do what is needed to reduce and eliminate dangers to the environment and health. The principle of substitution is regulated in the Act (1985:426) on chemical products. The principle of substitution means that industry is required whenever possible to replace dangerous substances and products with those that present less risk to health and the environment. Also the precautionary principle is mentioned in the Act on chemical products. The precautionary principle is: Where there are threats of serious or irreversible harm, lack or full scientific certainty about the cause and effects of environmental harm shall not be used as a reason for postphoning measures to prevent environmental degradation.

A continuos effort is made with the view of reducing the exposure of the environment to hazardous chemicals. .A Government Commission is recently appointed. The committee has the task to review Swedish chemicals policy against the background of, e.g. Sweden´s accession to the European Union, and a possibly changed risk picture caused by the use of chemicals. A new Governement Bill will be issued in the beginning of 1998 with detailed proposals on how to further minimise the risks of chemicals.

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of the Environment is the body mainly responsible for the issues related to this chapter. The County Administrative Boards bear responsibility for coordination at the regional level. The following legislation is related to the management of toxic chemicals: the Act (1985:426) on Chemical Products, the Sanitation Act (1979/596, revised in 1994), and the Ecocycle Bill (1993). The National Chemicals Inspectorate is charged with proposing actions to minimize the hazards entailed by various PVC additives. Actions include phase-out targets, labelling guidelines, disposal and EIAs. They are also charged with questions related to minimizing the use of heavy metals such as mercury, lead and cadmium as well as other chemicals, which pose unacceptable hazards to man or the environment.

2. Capacity-Building/Technology Issues:

3. Major Groups: Sweden chaired a Round Table Meeting of Ministers and CEO´s in January 1996 to initiate a dialogue between industry and governments with regard to the fulfillment of Agenda 21.

4. Finance:

5. Regional/International Cooperation: Sweden participated in and hosted the 1994 International Conference on Chemical Safety (ICCS), which constituted itself as the first meeting of the Intergovernmental Forum on Chemical Safety (IFCS) and also elected Sweden as President for the period up to and including the Second Forum. The Government also contributed funding for the participation of developing countries in the conference. Special efforts are being made to promote expertise in the control of chemicals among certain developing and eastern European countries. Sweden is also actively pursuing policy on chemicals within the EU and globally, such as through UNEP.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 20: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS WASTES, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN HAZARDOUS WASTES

NATIONAL PRIORITY:

STATUS REPORT:

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

- Basel Convention [✓] signed in 1989 [✓] ratified before 1 July 1992

- The latest information was provided to the Basel Convention Secretariat in 19--.

Additional comments relevant to this chapter: Industries generate as much as 75% of the total wastes generated in Sweden. Of the industries, the mining sector generates the most waste.

The industrial sector is encouraged to bear greater responsibility for the management of hazardous waste. As much waste as possible has to be recovered and recycled. Waste is also to be classified, transported and managed safely in environmental terms. Targets have been set for the collection of hazardous wastes, some of which have not been met. For example, the collection of nickel-cadmium batteries had only a 35% take-back rate compared to the target of 90% for July 1995.

Sweden is actively involved in the international ban against the exportation of hazardous wastes to non-OECD countries.

About 4,000 landfills have been shut down, with about 300 remaining, and industries have separate deposit sites of their own. About 50 landfills have equipment to recuperate methane gas formed as a result of anaerobic digestion. An on-going survey has identified about 800 industrially contaminated sites. Five hundred of these require further investigation and action. Metals account for the most serious cause of contamination, followed by toxic chemicals.

Exported waste fell significantly in 1992 over previous years, in large part due to new regulation restricting such exports, particularly to non-OECD countries. The recession was also a contributing factor.

In this chapter 20.22 (h) it is said that Governements should ascertain that their military establishments conform to their nationally applicable norms in the treatment and and disposal of hazardous waste. An environmental policy has been drawn up for the Swedish Armed Forces. The objectives in this policy state, among other things that the utilisation of resources, environmental hazards and the possibilities of reuse are to be taken into account in conjunction with procurement or modification of the materiels. Environmentally harmful substances and activities are successively replaced with less harmful ones.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The Ministry of the Environment is the body mainly responsible for the issues related to this chapter. The County Administrative Boards bear responsibility for coordination at the regional level. The following legislation covers issues related to this chapter: the Waste Collection and Disposal Act, the Ecocycle Bill (1993), and the Sanitation Act (1979/596, revised 1994). A special investigator have reviewed the collection and disposal of all batteries dangerous to the environment and have proposed a tax on cadmium batteries. Appropriate amendments will be introduced based on the findings of the investigator's report. The Environmental Protection Agency is charged with investigating the extent of illegal export and import of hazardous waste to and from Sweden, and to suggest suitable means to address this problem. Sweden has an ordinance which divides waste into differing degrees of danger to supplement the EC Transport Regulation. The Enviromental Protection Agency is charged with the control of permits for exports and imports.

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:** As an addition to the Basel Convention, Sweden and the EU, together with Norway, secured a ban on the export of hazardous waste for recovery from OECD to non-OECD countries, which enters into force on 1 January 1998. Sweden is pressing the EU to upgrade a number of hazardous wastes listed for export prohibition ("yellow list") under the Basel Convention.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199-	
Generation of hazardous waste (t)				
Import of hazardous wastes (t)				
Export of hazardous wastes (t)				
Area of land contaminated by hazardous waste (km^2)				
Expenditure on hazardous waste treatment (US$)				
Other data				

SWEDEN

AGENDA 21 CHAPTER 21: ENVIRONMENTALLY SOUND MANAGEMENT OF SOLID WASTES AND SEWAGE-RELATED ISSUES

NATIONAL PRIORITY:	
STATUS REPORT: The local authorities bear full responsibility for overall waste management, and it is their obligation to draft special waste management plans. In most municipalities, source separation of household waste encompasses paper, glass, batteries and other hazardous waste. The Environmental Protection Agency is charged with developing quantitative targets and actions for the improved management of wastes. This includes developing criteria for the types of waste to be received at landfills and incineration plants, among others. The Environment Code Commission is currently engaged in a review of waste management legislation, with particular reference to the allocation of responsibilities between different agents (e.g., producers, municipalities and contractors). Sweden is pressing the EU for the codification of the producer responsibility principle and for future EU law to be more general. Nitrogen reduction is introduced at a number of coastal municipal wastewater purification plants. This introduction continues.	

Cross-Sectoral Issues

1. **Decision-Making Structure:** The Ministry of the Environment is the body mainly responsible for the issues related to this chapter. The County Administrative Boards bear responsibility for coordination at the regional level. The following legislation covers the issues related to this chapter: The Waste Collection and Disposal Act, the Ecocycle Bill (1993), and the Sanitation Act (1994).

2. **Capacity-Building/Technology Issues:** In 1995, the secretariat of the Waste Management Research Council was transferred to the Environmental Protection Agency.

3. **Major Groups:** A study has been started by the Environmental Protection Agency, the Swedish Association of Local Authorities, the Federation of Swedish Farmers and the Swedish Water and Waste Water Works Association, together with a number of experimental municipalities to monitor developments in, and develop targets for, environmentally appropriate water supply and sewerage systems.

4. **Finance:**

5. **Regional/International Cooperation:** The Swedish International Development Agency (SIDA) is taking part in direct investments in about ten different projects at sewage treatment plants.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199-	
Generation of industrial and municipal waste (t)				
Waste disposed(Kg/capita)				
Expenditure on waste collection and treatment (US$)				
Waste recycling rates (%)				
Municipal waste disposal (Kg/capita)				
Waste reduction rates per unit of GDP (t/year)				
Other data				

AGENDA 21 CHAPTER 22: SAFE AND ENVIRONMENTALLY SOUND MANAGEMENT OF RADIOACTIVE WASTES

NATIONAL PRIORITY:

STATUS REPORT: The radiation levels recently measured in Sweden pose no risk of serious effects to human health. Safety at Swedish nuclear power stations is monitored by the Swedish Nuclear Power Inspectorate (SKI). Emissions into the air and water have been low, but some plants have suffered an increased amount of radiation. The main reason for this is the increased use of older reactors. Inspections and repairs have also caused increases in radiation levels. The National Radiation Protection Institute (SSI) has entered into special discussions with the power industry on how to counter this trend.

As a result of the issue of additional dose limit regulation by the SSI, the number of individuals with high doses of radiation in Sweden has decreased significantly. Radiation doses to the public in the vicinity of the plants are consistently below the limits. This is considered a reflection of the favourable dilution conditions.

Management of spent nuclear fuel and nuclear waste at the nuclear power plants and at the central interim storage facility and the repository for radioactive operational waste is being handled satisfactorily. The plants' emergency response systems are also considered to be satisfactory. Nonetheless, inspections have revealed some minor deficiencies in procedures and documentation. Uncertainties remain surrounding the factors which may limit the lifetime of Sweden's reactors.

Cross-Sectoral Issues

1. Decision-Making Structure: In its inspection work, the Swedish Nuclear Power Inspectorate (SKI) systematically evaluates the organization of its nuclear power plants and safety culture.

2. Capacity-Building/Technology Issues: There is often a shortage of in-house specialist expertise within different areas, and may lead to too great a dependency on consultants.

3. Major Groups:

4. Finance:

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTERS 23-32: MAJOR GROUPS

The role of major groups are also covered under the various chapters of Agenda 21. The following is a summary of main objectives outlined in Agenda 21. Please check the appropriate boxes and describe briefly any important steps or obstacles.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 24: GLOBAL ACTION FOR WOMEN TOWARDS SUSTAINABLE AND EQUITABLE DEVELOPMENT.
The Convention on the Elimination of All Forms of Discrimination Against Women was

☑ signed on 7 March 1980
Date

☑ ratified on 2 July 1980
Date

24.b Increasing the proportion of women decision makers.

Percentage of women:	**1992**	**1996**
in government %	38	50
in parliament %	32	40
at local government level %	34	41

24.2.e assessing, reviewing, revising and implementing curricula and other educational material with a view to promoting dissemination of gender-relevant knowledge.
Curricula and educational material

☑ already promote gender relevant knowledge ☐ is being revised ☐ No action yet

24.2.f and 24.2.c formulating and implementing policies, guidelines, strategies and plans for achievement of equality in all aspects of society including issuing a strategy by year 2000 to eliminate obstacles to full participation of women in sustainable development. Policies/strategies etc. have been

☑ drawn up/ completed ☐ are being drawn up ☐ will be in place by 2000 ☐ no plans at present

24.2.d establishing mechanisms by 1995 to assess implementation and impact of development and environment policies and programmes on women

☐ Mechanisms are in place ☐ Mechanisms are being developed ☐ No plans at present

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Major Groups participate in environmental impact assessments at the local and national levels, contributing to the design of sustainable development policies and programmes and participating in project implementation. Representatives of major groups have been included in the Swedish delegations to past sessions of the CSD and will be invited to take part in the 1997 session. They participated in HABITAT II, and will also be represented on the Swedish delegation to the UN General Assembly. Sweden continues consultations with all representatives of major groups on issues linked to sustainable development.

The contributions of local and national representatives of major groups to sustainable development at the national level are considered essential, with regional and international major groups being considered quite helpful and constructive. In general, Sweden proposes to enhance the transparency and open discussion processes, financial support and participation of representatives of major groups in official delegations. The Swedish Society for Nature Conservation, the organization Q2000 and representatives from trade unions, industry, the scientific community and local authorities are full members of the National Sustainable Development Coordination Mechanism.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 25: CHILDREN AND YOUTH IN SUSTAINABLE DEVELOPMENT.

25.4 establishing processes that promote dialogue between the youth and government at all levels and mechanisms that permit youth access to information and opportunity to present their views on implementing A21.

Name relevant youth fora (3-4 most important):

1.
2.
3.
4.

Describe their role in the national process: ☐ Full participants ☑ advisory ☐ Ad hoc

25.6 reducing youth unemployment

Youth unemployment 1992:_____ 1996:_____

25.5 ensuring that by year 2000 more than 50% of youth -- gender balanced -- have access to appropriate secondary education or vocational training.

The goal set in Agenda 21:

☐ has been reached ☑ will be reached by year 2000 ☐ will be reached by year ------ ☐ No goal set yet nationally

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Local authorities, youth organizations and NGOs receive US$ 1 million a year and technical support.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 26: RECOGNIZING AND STRENGTHENING THE ROLE OF INDIGENOUS PEOPLE AND THEIR COMMUNITIES.

26.3.a establishing a process to empower indigenous people and their communities -- through policies and legal instruments:

- [x] in place
- [ ] not in place

26.3.b strengthening arrangements for active participation in national policies

- [ ] indigenous people participate fully in appropriate national processes
- [ ] indigenous people participate as advisors
- [ ] not relevant
- [ ] indigenous people participate on an ad hoc basis
- [ ] indigenous people do not yet participate

26.3.c involving indigenous people in resource management strategies and programmes at the national and local level.

- [x] indigenous people are fully involved
- [ ] mechanisms for involvement being discussed
- [ ] no action yet

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Governmental Bill 1992/93:32 proposes that a special governmental authority, the Sametinget, be established to promote the vitality of the Sami culture, and to decide on the allocation of state subsidies and other funds to the Sami people. The Sametinget (a special governmental authority) is to promote the Sami language, to disseminate information on the Sami people, to participate in physical planning and to ensure that Sami interests are taken into account, including reindeer herding, land and water utilization.

Ch. 27: STRENGTHENING THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS: PARTNERS FOR SUSTAINABLE DEVELOPMENT.

27.5 developing mechanisms that allow NGOs to play their partnership role responsibly and effectively.
27.6 reviewing formal procedures and mechanisms to involve NGOs in decision making and implementation.
27.8 promoting and allowing NGOs to participate in the conception, establishment and evaluation of official mechanisms to review Agenda 21 implementation.

- [x] mechanisms exist already
- [ ] mechanism planned for 199-
- [ ] NGOs are participating fully
- [x] NGO inputs are important
- [ ] NGOs inputs are adhoc
- [ ] no significant NGO inputs

27.7 establishing a mutually productive dialogue by 1995 at the national level between NGOs and governments.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page) Sweden held consultations with Greenpeace concerning toxic chemicals and cooperates with the Stockholm Environment Institute (SEI) in carrying out a global water survey.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 28: LOCAL AUTHORITIES' INITIATIVES IN SUPPORT OF AGENDA 21.

28.2.d encouraging local authorities to implement and monitor programmes that aim to ensure participation of women and youth in local decision making.
There are at least ------ local agenda 21s. -----% involve representation of women and/or youth
They involve ----% of population
Government support of local agenda 21 initiatives:

☑ supports ☐ plans to support ☐ does not support

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Swedens 288 local authorities play a very important role in environmental protection work and in the work towards longterm sustainable development. Each municipal governement must see to it that industry, traffic, waste management and energy use take health and environmental consideration in account. Their environment and public health committees as well as their building committees bear the the main responsibility for local environmental matters.

The Environmental Protection Agency, in cooperation with the National Board of Housing, Building and Planning, the Swedish Association of Local Authorities and representatives of the country administrations, among others, recently (1996) embarked on an evaluation of work by the county administrations on their environmental strategies.

All Swedish local authorities have begun work on developing and implementing local Agenda 21 initiatives. About half of the local authorities have Agenda 21 coordinators, and are organizing seminars, courses and practical counselling activities for the general public. The local authorities are also working with businesses and NGOs, as well as with various projects such as public awareness campaigns, environmental audits and green accounting. Main issues have so far concentrated on waste management, water and sewage treatment and consumption. Traffic, energy, nature conservation, construction and toxic chemicals are also beeing adressed. 2/3 of the local authorities have environmental criterias for municipal purchasing. 90 percent of the local authorities have in one way or another went in for information to the public, 40 per cent have given information designed for women and youth.

Sweden has allocated approx. US$ 1.5 million to support local Agenda 21 activities through the Environmental Protection Agency in the form of grants to local authorities and NGOs.

Ch. 29: STRENGTHENING THE ROLE OF WORKERS AND THEIR TRADE UNIONS.

29.2 full participation of workers in implementation and evaluation of A21.
29.3 a to e (By year 2000, (a) promoting ratification of ILO conventions; (b) establishing bipartite and tripartite mechanism on safety, health and sustainable development; (c) increasing number of environmental collective agreements; (d) reducing occupational accidents and injuries; (e) increasing workers' education and training efforts.

☑ ILO Conventions have been ratified
☐ will be ratified by year 2000
☐ Workers take full part in National Agenda 21 discussions/implementation
☑ Workers take some part in National Agenda 21 discussions/implementation
☐ Workers do not yet participate in National Agenda 21 discussions/implementation

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

30: STRENGTHENING THE ROLE OF BUSINESS AND INDUSTRY.

30.6 increasing the efficiency of resource use, including reuse, recycling, and reduction of waste per unit of economic output.

☑ There are governmental policies encouraging the above objective

☑ There are governmental policies requiring recycling etc.

30.18.a encouraging the concept of stewardship in management and use of natural resources by entrepreneurs.

List any actions taken in this area: An Ecocycle Commission was established by the Swedish Governement in 1993 in order to pursue and co-ordinate work on ecocyclic issues. The Commission has the mandate to formulate a strategy for the the transition to an ecocyclic society in which producers are responsible for their goods. This involves i.a. determining priority areas for action in the light of natural resource management and the risk of damage to the environment and also formulating objectives and timetables for applying the principle of producer responsibility.The Commission has submitted draft legislation on producer responsibility for tyres, cars, building materials and electronics to the Governement. Producer responsibility is up to now implemented for packaging, recyclable paper and tyres.

The Federation of Swedish Industries supports the principles concerning the responsibility of industry in environmental management, stressing the importance of cooperation between the government and industry as well as the crucial importance of international environmental action, particularly in the Baltic Region. Sweden has adopted regulation on environmental management and audits based on a programmes of voluntary participation by industry to improve and assess their own environmental actions and to make information generally available. This regulation would be consistent with that which came into effect in the European Union in 1993 and would require certain environmental action to be conducted by the companies which choose to participate in the programme. Small- and medium-sized companies can be given extra support to be able to participate.

Eco-labeling is an important tool in encouraging environmentally sound practices by industry (see chapter 2 on international cooperation to accelerate sustainable development and chapter 4 on changing consumption patterns).

30.18.b increasing number of enterprises that subscribe to and implement sustainable development policies.

No statistical figures of the number of percent of enterprises are available. Recycling targets and levels achieved (%) in Sweden, 1997 and 1994 is as follows.

Type of material	Recycling target, 1/1 1997	Estimated level achieved, 1994 Beer/soft
drink bottles	95	97
Wine/spirits bottles filled in Sweden(r)	90	84
Other types of glass (m)	70	56
Corrugated cardboard (m)	65	74
Other board and cardboard (m)	30	<5
Aluminium cans (r)	90	91
Other aluminium(m)	50	<5
Refillable polyethylene terephthalate (PET) bottles(r)	90	85
Recyclable PET bottles (m)	90	85

r = reuse, m = reuse or material recycling, PET = Swedish abbreviation for PETP

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): The Environmental Protection Agency has embarked on a ten-year programme to review emissions from environmentally hazardous operations at industrial sites. The Ministry of the Environment and the Ministry of Industry and Trade set up a special working committee and convened a conference in 1996 to identify key areas in which instruments of environmental policy and industry policy can be developed and coordinated. In September 1996 the Ministry of Industry and Trade has appointed a delegation which should develop a strategy for promoting environmental technology. The Royal Academy of Engineering Sciences (IVA) has carried out a survey of Sweden's environmental industry. The Eco-Management and Audit Scheme (EMAS) was introduced in Sweden, as in the rest of the EU, in 1995, to improve and evaluate environmental management in industry and to keep the general public informed of its progress. A commission has been appointed to clarify the environmental that give rise to financial risks and the information that is required to make financial assesments of environmental risks. The investigation is due to give its report by the end of 1996. Other monitoring, assessment and information dissemination bodies include the Swedish Eco-Management Council, the Swedish Board for Technical Accreditation, the National Board for Industrial and Technical Development and the Environmental Protection Agency. The Swedish Eco-Management Council is now in progress to extend EMAS to nonindustrial sectors as transportation , forestry, construction and real estate management to begin with.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 31: SCIENTIFIC AND TECHNOLOGICAL COMMUNITY.

31.3.b improving exchange of knowledge and concerns between s&t community and the general public.

- [x] scientific community has already established ways in which to address the general public and deal with sustainable development
- [ ] there is some effort in this direction
  brief description: _____
- [ ] Not much has changed in this area

31.9 developing, improving and promoting international acceptance of codes of practice and guidelines related to science and technology and its role in reconciling environment and development.

Brief comments on this chapter not already described in chapter 35 (maximum 100 words) (please, do not exceed this page):

Ch. 32: STRENGTHENING THE ROLE OF FARMERS.

32.5.c promoting and encouraging sustainable farming practices and technologies.

32.5.e developing a policy framework that provides incentives and motivation among farmers for sustainable and efficient farming practices.

32.5.f enhancing participation of organizations of farmers in design and implementation of sustainable development policies.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): The Federation of Swedish Farmers stands behind the general Swedish environmental goals for agricultural policy as well as other goals concerning an increased environmental focus of agricultural research and development, reduced use of animal antibiotics and improved animal welfare.

AGENDA 21 CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Financial resources and mechanisms are also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national financial policies, domestic and external (including ODA)

NATIONAL PRIORITY:

STATUS REPORT: Since 1984, the following environmental taxes have been introduced: a carbon dioxide tax, a sulphur tax, a tax on domestic aviation, a nitrogen oxide charge, a charge on batteries, a charge on pesticides and a charge on commercial fertilizer. Taxes on energy are environment-related and differentiated for petrol and diesel oils. The purchase tax on private vehicles has been replaced by an increased annual tax. The whole tax system regarding road traffic is at present beeing analyzed in order to strengthen its capability to steer traffic in respect of a better environment and traffic safety.

Total revenue from all environment related taxes listed under PROGRESS is about US$ 9 billions per year. Special funding has been allocated for job creation measures in the environmental sector and for investments in ecological adjustment. See also chapter 37.

CHANGES IN NATIONAL BUDGET TO ADDRESS SUSTAINABLE DEVELOPMENT:

A one billion SEK environmental investment programme for a period of five years will start in 1997 in order to stimulate the adaption to recycling of the water and sewage systems. In resedential areas and within construction investment grants is to be payable for measures that improve the environment, develop technology and create employment.

NEW ECONOMIC INSTRUMENTS: Environmental taxes on commercial fertilizer have been increased, together with the carbon dioxide tax. A government bill was passed in 1995 to increase the carbon dioxide tax paid by industry. Other taxes include those on gravel, sulphur oxides and nitrogen oxides. A waste tax is being considered. (See chapter 8 for additional information.)

ELIMINATION OF ENVIRONMENTALLY UNFRIENDLY SUBSIDIES: A tax reform has increased the costs for private driving of company cars.

Currently an investigation is being carried out concerning the existence of environmentally unfriendly subsidies in Sweden.

ODA policy issues

☑ donor country ☐ Recipient

Compare chapter 37.

STATISTICAL DATA/INDICATORS						
	1992	1993	1994	1995	1996	
ODA funding provided or received (Total US$million)						
	Average for 92-93		Average for 94-96			
Net flow of external capital from all sources as % of GDP						
Other data						

AGENDA 21 CHAPTER 34: TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, COOPERATION AND CAPACITY-BUILDING

Transfer of environmentally sound technology, cooperation and capacity-building is also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national policies and actions relating to chapter 34.

NATIONAL PRIORITY:

STATUS REPORT ON LINKS BETWEEN NATIONAL, REGIONAL AND INTERNATIONAL INFORMATION NETWORKS/SYSTEMS: The Swedish National Board for Industrial and Technical Development is responsible for information systems on environmentally sound technology. A delegation has been appointed to determine which markets can be effectively influenced in favour of sustainable development through stricter environmental stipulations for public procurement of technology. State-directed technology procurement has already proven an effective means of encouraging more energy-efficient products.

An advisory panel on environmental technology has been appointed to draw up a programme for how to promote the use of environmental technology in the industry, including a strategy for procurement of environmental technology and how to realize it.

MEANS OF IMPLEMENTATION:

• Describe any work being undertaken at the national or local level regarding efforts to promote clean production processes and/or the concepts of eco-efficiency. These processes may include training, preferential financial arrangements, information dissemination and changes in legal or regulatory frameworks.

Procurement of energy conserving products (750 million SEK 1991-98). The procurement scheme focus on areas where technical development is needed to meet end user requirements with respect to energy effeciency. The customers are subsidised for their incremental costs related to the risks of using new technology.

• Provide information on the adoption of environmental management systems. National reaction to environmental management system standards such as the ISO 14000 Series and others. Please note efforts made at the national level to promote their adoption and the creation of certification infrastructure in order to facilitate access to these standards to local industry.

The National Board for Industrial and Technical Development (NUTEK) has been given the task to supply information and help small and medium businesses interested in acceding to EMAS (a budget of 6,5 million SEK).

• List and describe programs or work under way to facilitate the transfer of ESTs to small and medium sized enterprises. Please note efforts to facilitate access to financial resources and other transfer strategies.

AGENDA 21 CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT ON NATIONAL SCIENTIFIC KNOWLEDGE, RESEARCH NEEDS AND PRIORITIES:

Environmental issues have recently received increased emphasis in higher education. The Governement Research Bill for the period 1997 - 99, which was presented to the Parliament in september 1996 gives priority to research on environmentally toxic substances, climate , biodiversity and protection against radioactivity. Resources are also allocated to research on class related disease patterns, i.e. inequality in health. Sweden will also actively support the establishment of international research networks for global issuess such as food supply, energy, health and and environment. Environmental research within universities has been given a high importance, particularly the fields of biological diversity and climate. The Swedish University of Agricultural Sciences (SLU) and the Swedish Council for Forestry and Agriculture Research (SJFR) have, for example, changed their overall objectives to be more in line with the decisions of the Rio Conference. The Stockholm Environment Institute (SEI) focuses on international strategic environment research in areas such as climate and energy, environmental technology, biotechnology, and water-related issues.

Swedish scientists have been active in the EU's Environment and Climate programme. Swedish researchers have been particularly successful in the fields of global changes, external environment, and environmental protection in the areas of health and social sciences.

STEPS TAKEN TO ENHANCE SCIENTIFIC UNDERSTANDING, IMPROVE LONG TERM SCIENTIFIC ASSESSMENT, BUILDING OF CAPACITY AND CAPABILITY: The Ministry of Education and Science is the body primarily responsible for education and research, natural and social sciences and related legislation.

Measures have been taken to encourage education and research in the areas of science and technology. Plans have been developed giving particular attention to equal opportunity and encouraging more woman students in the areas of science and technology.

Sweden has supported research at a large number of universities and research institutions at the national, regional and international levels. The Swedish Agency for Research and Environmental Cooperation (SAREC) allocated approx. US$ 23 million in 1993 to such organizations.

The Foundation for Strategic Environmental Research (MISTRA) began its work in 1995. In 1993, the government and parliament decided to use "wage-earner funds" to advance the development possibilities of environmental research. These funds are being managed by the MISTRA.

The joint section for environmental research at Chalmers University of Technology and the University of Göteborg is one example of many university departments and colleges organizing themselves for inter-disciplinary efforts to address complex environmental problems.

STATISTICAL DATA/INDICATORS			
		Year	
Number of scientists, engineers and technicians engaged in research and experimental development	61 000	1995	
Total expenditure for research and experimental development (US$ million)		757	
Other data:			

SWEDEN

AGENDA 21 CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

NATIONAL PRIORITY:

STATUS REPORT:

The overall aim for the Swedish education system is that environmental issues is to be found as a red line through all levels of education. All regulations in law and ordinance for the Swedish education system are, as it relates environment , in line with Agenda 21. Environment perspectives shall be taken into consideration in all subjects and education programmes at all levels of the education system. The pedagogical programme for pre-schooling is divided into three fields of which one is nature. In the School Act from 1985 for compulsory schools, upper secondary education and municipal adult education the care for the environment is emphasized. Universities and university colleges shall offer tertiary education of high quality and among other things promote an ecological sustainable development. Some of the general objectives for research is to generate new significant knowledge about nature, society and culture and give perspective on the position of man in the universe , in the ecosystems of the planet earth and in history and to contribute to the preservation and development of health, culture, welfare and environment for all individual and groups of the population and for future generations.

The Agenda 21 Committee encourages partnerships, mobilizes resources, provides information and assesses the needs of different population groups.

a) Reorientation of education towards sustainable development

Environmental issues are to be highlighted and integrated into all subjects, with greater weight being placed on environmental issues in the syllabi in upper secondary school.

b) Increasing public awareness

Popular education - folk high schools and educational associations (Study circles) - with its objective to develop basic democratic values in society by giving all citizens the opportunity to develop their general knowledge and skills has a very important role in increasing public awareness.

Another way of increasing public awareness is by giving the population at large information through television news, public service announcements and programmes focussing on natural sciences. Information about Agenda 21 efforts, local and regional, has been disseminated by special campaigns mainly in the metropolitan areas.

c) Promoting training

The Environmental Protection Agency provides information and training on the environment to teachers and with other organizations supports a local network with environmental know-how and information on Agenda 21.

ROLE OF MAJOR GROUPS: Major Groups that are members of the Agenda 21 Committee also participate in activities under this chapter. Projects have been introduced to eliminate gender stereotyping, e.g., to encourage women to choose technical and scientific studies and for men to choose studies in teaching and nursing.

FINANCING AND COST EVALUATION OF THE LABOUR ACTIVITIES:

STATISTICAL DATA/INDICATORS				
	1980	1990	Latest 1994	
Adult literacy rate (%) Male	100	100	100	
Adult literacy rate (%) Female	100	100	100	
% of primary school children reaching grade 5 (1986-97)	100	100	100	
Mean number of years of schooling (compulsory school)	9	9	9	
% of GNP spent on education	9.0	7.7	8.0	
Females per 100 males in secondary school	104.1	100	96	
Women per 100 men in the labour force (25 - 64 år)	82	92	96	
Other data				

AGENDA 21 CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES

National capacity building is also covered under sectoral chapters.
Donors: You may wish to describe here how Agenda 21 has influenced your ODA policies in this area.
Developing countries: You may wish to describe any new national mechanisms for capacity building - and any changes in technical cooperation.

NATIONAL PRIORITY: In 1995 Sweden was the second leading DAC member with repect to ODA/GNP ratio at 0.89 per cent and was the eight largest in absolute terms with US $ 2 billion in disbursements.

Sweden has since 1988 had a policy objective of all development assistance to promote the sustainable use of natural resources and the protection of the environment. Environmental Impact Assessments have been compulsary for all projects since 1991.

After UNCED a working group was set up to develop general principles, guidelines and working methods to integrate the decisions at UNCED in the framework of Swedish development cooperation. In the report entitled Sustainable Aid: Swedish Development Assistance after UNCED, the group put forward recommendations, which the Swedish International Development Cooperation Agency (Sida) has used as a basis to work out its Plan of Action for Sustainable Development. In July 1996 the Swedish Government also reported to the parliament the policies within the international development cooperation regarding sustainable development.

The main elements of the policy for sustainable development is the focus on poverty reduction. Certain sectors are identified as particularly important to achieve sustainable development; fresh water, agriculture and forestry, marine environment, urban environment and energy. Support to capacity-building, education and institutional support are core priorities, as well as support to democratic institutions and an increased attention to the role of women in development.

STATUS REPORT ON NATIONAL ENDOGENOUS CAPACITY BUILDING: The establishment of NGOs in developing countries is being supported, as are the environmental aspects of development cooperation with other NGOs. Sweden is also working actively on environmental issues through its representatives in development banks as well as in other UN agencies.

AGENDA 21 CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

Ch. 38: Brief summary of any particular UN System response affecting this country/state:

For half a century Sweden has been dedicated to multilateral cooperation and to a strong and effecient United Nations. Sweden is an active participant in the UN and its various institutions and is working for an efficient and vitalized UN.

Sweden has actively promoted poverty reduction, sustainable development and gender-issues at all levels in the UN-system.

Sweden has also participated in all UN conferences since UNCED and has issued a publication entitled The UN World Conferences of the Nineties presented at the 51:st General Assembly. It provides an account of the conclusions from the conferences, focusing both on their individual and common themes and their guiding principles, and will hopefully be of value for the continued follow-up of all conferences.

Sweden has been involved in a number of important initiatives, such as in regard to women and the environment (through the Beijing Conference), the role of UNEP on land-based activities threatening coastal environments and persistent organic pollutants (POPs), and prior informed consent (PIC) procedures. Sweden has also made an active contribution towards bringing about an early preparatory process for a review of control procedures and other outstanding institutional questions prior to the special session of the General Assembly in 1997. It should also be mentioned that Sweden is playing a very active role in cordinating the UNESCO Baltic Sea Project. A subregional project mainly focusing on environmental education and education for international understanding within a network between schools in countries surrounding the Baltic Sea. Among other things this project has helped to implement Agenda 21 e.g. in the Baltic regions. This project is now seen as a model for creating such subregional projects in other parts of the world.

For half a century Sweden has been dedicated to multilateral cooperation and to a strong and efficient United Nations.

AGENDA 21 CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

Ch. 39: International Legal Instruments are covered under the relevant sectoral chapters. This is a listing of major agreements/conventions (not already covered) entered into and relevant to Agenda 21: Sweden has a firm commitment to the development of international legal instruments aiming at sustainable development on the assumption that such instruments should contain precise and concrete obligations with implementation mechanisms and allow for follow-up measures. The following agreements and conventions are relevant to sustainable development and either predates the Rio conference or are yet to enter into force.

- The Wienna Convention (ratified 1986) and Montreal Protocol for the Protection of the Ozone Layer and its amendments (ratified 1988, 1991, 1993)
- the Basel Convention (ratified 1991),
- the Antarctic Treaty (ratified 1984) and its Protocol on Environmental Protection,
- the Convention on Straddling Fish Stocks and
- The London Dumping Convention and the 1996 Protocol to the convention.
- The Framework Convention on Climate Change (ratified 1993)
- The Convention on Biological Diversity (ratified 1993)
- The Convention to Combat Desertification in those Countries Experiencing Drought and/or Desertification, Particularly in Africa (Ratified 1995)

AGENDA 21 CHAPTER 40: INFORMATION FOR DECISION-MAKING

This chapter is also covered under sectoral and other chapters of this profile. The matrix below gives an overview of how national authorities rate the available information for decision making.

Rating of available data and information suitable for decision-making

	Agenda 21 Chapters	Very good	Good	Some good data but many gaps	Poor	Remarks
2.	International cooperation and trade					
3.	Combating poverty	✓				
4.	Changing consumption patterns					
5.	Demographic dynamics and sustainability	✓				
6.	Human health	✓				
7.	Human settlements		✓			
8.	Integrating E & D in decision-making					
9.	Protection of the atmosphere					
10.	Integrated planning and management of land resources	✓				
11.	Combating deforestation					
12.	Combating desertification and drought					
13.	Sustainable mountain development					
14.	Sustainable agriculture and rural development					
15.	Conservation of biological diversity					
16.	Biotechnology					
17.	Oceans, seas, coastal areas and their living resources					
18.	Freshwater resources					
19.	Toxic chemicals					
20.	Hazardous wastes					
21.	Solid wastes					
22.	Radioactive wastes					
24.	Women in sustainable development					
25.	Children and youth				✓	
26.	Indigenous people					
27.	Non-governmental organizations					
28.	Local authorities					
29.	Workers and trade unions					
30.	Business and industry					
31.	Scientific and technological community					
32.	Farmers					
33.	Financial resources and mechanisms					
34.	Technology, cooperation and capacity-building					
35.	Science for sustainable development		✓			
36.	Education, public awareness and training		✓			
37.	International cooperation for capacity-building					
38.	International institutional arrangements					
39.	International legal instruments					
40.	Information for decision-making					

Additional Comments: Within the OECD-programme for indicators, Sweden contributes to the development of sustainable development indicators at the regional and national levels. No work has been done to carry out indicators at the local level. An overall policy/framework for information for decision-making has not been established. Official statistics, data and information compiled by local authorities and by regional and central agencies are the main sources of information on sustainable development.

Statistics Sweden is responsible for the work on indicators for sustainable development. Representatives of major groups are not involved in this work. The CSD process of developing indicators is seen as a difficult task, but one of major importance for national development.

Networks of computers are generally available throughout both the public and private sectors, with access to international information services. Sweden also has access to remote sensing data.

The Environmental Protection Agency is responsible for environmental monitoring activities, including defining conditions to effectively meet targets previously set. A great deal of data and information is communicated to various international conventions and organizations, including the European Environmental Agency.

Environmental monitoring activities during 1995/1996 have included nationwide inventories of metals (cadmium in particular) in soil and crops, lakes and watercourses. The lake inventory is a joint Nordic undertaking with the objective to determine the extent of acidification in Nordic water bodies. The inventory will be used as a basis of international negotiations on this subject. Sweden is taking the lead in the moss inventory, part of the 30 European country project to determine the presence of heavy metals in humus and moss. A great deal of data and information collected in the course of Sweden's environmental monitoring are reported to various international conventions and organizations. The Environmental Data Centre in Kiruna uses satellite data for environmental monitoring, was designated a European Topic Center for land coverage in 1996.

The Environmental Protection Agency has been commissioned to present a comprehensive annual report on environmental policy work in Sweden, with reference to the hundred or more national objectives adopted by the Swedish Parliament (Riksdag).

STATISTICAL DATA/INDICATORS

	1989	1993	Latest 199-	
Number of telephones in use per 100 inhabitants	67.4	67.8		
Other data				